

M A R C H 2 0 1 0

REPORT TO THE CONGRESS

Medicare Payment Policy



The Medicare Payment Advisory Commission (MedPAC) is an independent congressional agency established by the Balanced Budget Act of 1997 (P.L. 105–33) to advise the U.S. Congress on issues affecting the Medicare program. In addition to advising the Congress on payments to health plans participating in the Medicare Advantage program and providers in Medicare’s traditional fee-for-service program, MedPAC is also tasked with analyzing access to care, quality of care, and other issues affecting Medicare.

The Commission’s 17 members bring diverse expertise in the financing and delivery of health care services. Commissioners are appointed to three-year terms (subject to renewal) by the Comptroller General and serve part time. Appointments are staggered; the terms of five or six Commissioners expire each year. The Commission is supported by an executive director and a staff of analysts, who typically have backgrounds in economics, health policy, and public health.

MedPAC meets publicly to discuss policy issues and formulate its recommendations to the Congress. In the course of these meetings, Commissioners consider the results of staff research, presentations by policy experts, and comments from interested parties. (Meeting transcripts are available at www.medpac.gov.) Commission members and staff also seek input on Medicare issues through frequent meetings with individuals interested in the program, including staff from congressional committees and the Centers for Medicare & Medicaid Services (CMS), health care researchers, health care providers, and beneficiary advocates.

Two reports—issued in March and June each year—are the primary outlets for Commission recommendations. In addition to annual reports and occasional reports on subjects requested by the Congress, MedPAC advises the Congress through other avenues, including comments on reports and proposed regulations issued by the Secretary of the Department of Health and Human Services, testimony, and briefings for congressional staff.

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March 1, 2010

The Honorable Joseph R. Biden
President of the Senate
U.S. Capitol
Washington, DC 20510

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
U.S. Capitol
Room H-232
Washington, DC 20515

Dear Mr. Vice President and Madam Speaker:

I am pleased to submit the Medicare Payment Advisory Commission's March 2010 *Report to the Congress: Medicare Payment Policy*. This report fulfills the Commission's legislative mandate to evaluate Medicare payment issues and to make recommendations to the Congress.

The report contains six chapters:

- a chapter that provides context for those that follow by documenting the rise in Medicare and total health care spending.
- a chapter with five sections that describes the Commission's recommendations on rate updates for six payment systems used by traditional Medicare.
- a chapter with four sections that describes the Commission's recommendations on rate updates for the four post-acute care payment systems used by traditional Medicare.
- a chapter that provides updated statistics on enrollment, plan offerings, and payments in Medicare Advantage plans and repeats our recommendations from previous years.
- a chapter with updated statistics on enrollment and plan offerings for plans that provide prescription drug coverage.
- a chapter responding to a congressional mandate to compare quality among Medicare Advantage plans and between those plans and traditional Medicare, with the Commission's recommendations.

The goal of Medicare payment policy is to get good value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. Anything

less does not serve the interests of the taxpayers and beneficiaries who finance Medicare through their taxes and premiums. Although this report addresses many topics to increase value, its principal focus is the Commission's recommendations for annual rate increases under Medicare's various fee-for-service payment systems. The Commission bases its rate recommendation for each Medicare payment system on an assessment of payment adequacy, including beneficiary access to care, changes in the supply of providers and service volume, quality of care, access to capital, and provider profit margins (where data are available). Annual changes in the rate paid to providers are often referred to as updates.

Updates change the base rate paid by Medicare for each unit of service provided—for example, a hospital admission, a physician visit or procedure, or an episode of home health care. To calculate the ultimate payment for a unit of service, base rates are multiplied by relative values or case weights that reflect the complexity of the services provided as well as by adjustments for geographic variation in input prices.

Managing base rates will not solve the fundamental problem with current Medicare payment systems, discussed in our June 2008 report, that providers are paid more when they deliver more services (fee-for-service), without regard to the quality or value of those additional services. To address that problem directly, the Commission was an early proponent of payment reforms now widely discussed, including “medical homes,” “bundling,” and “accountable care organizations.” Discussion of the details of these proposals is beyond the scope of this letter; suffice to say that each payment reform would attempt to reduce the prevailing incentive to provide more care, especially more complex care. In addition, payment reforms strive to reward better coordination of care, especially for patients with complex conditions.

For two reasons, however, comprehensive reform of Medicare's payment systems is not a ready panacea. First, the new payment models need to be tested and refined; it is one thing to conceptualize a new model but quite another to implement it on a broad scale. Second, reorganization of how care is delivered may be necessary for payment reform to work. For example, “bundling” would pay a lump sum to the hospital, physicians, and post-acute providers caring for a patient during an inpatient admission plus some interval post-discharge (e.g., 30 days). Currently, those providers often act independently of one another and have no formalized means for collaborating, much less for sharing financial risk. Payment reform will often require reorganizing the delivery of care, a complex and time-consuming activity in its own right.

While the Commission maintains that Medicare's payment systems must be reformed, in the interim it is imperative that the current fee-for-service payment systems be managed carefully. As much as reformers—including the Commission—may wish to hasten a sweeping overhaul of Medicare payment systems, Medicare is likely to continue using its current payment systems for some years into the future. This fact alone makes unit prices—both their overall level and the relative prices of different services—an important topic. In addition, unit prices under the current payment systems could affect the prospects for payment reform for the following reasons:

- ***The level of unit prices has an immediate and direct effect on Medicare expenditures.*** By limiting unnecessary updates, the Congress can achieve budget savings and lower beneficiary premiums and cost sharing. Although some critics of Medicare claim that it pays too little for each unit of service, in their 2003 *Health Affairs* article, Uwe Reinhardt, Gerard Anderson, and others found that high unit prices are one of the most important reasons that total U.S. health expenditures per capita are the highest in the world.
- ***By limiting and altering Medicare's unit prices, Medicare provides an impetus for providers to volunteer for experiments with new payment methods.*** Medicare payment reform will often require changes in how providers are organized. Therefore, payment reform will likely need to proceed, at least initially, on a voluntary basis. Voluntary reform poses two challenges: First is the challenge of getting enough volunteers; after all, reorganizing can be difficult work since it may well entail a redistribution of income among

participants. A physician subspecialist, for example, is unlikely to volunteer to participate in an accountable care organization that intends to redistribute income from subspecialists to primary-care providers—unless the subspecialist believes that redistribution is likely to happen under the current payment system. The second challenge is that if there is no financial pressure on providers that choose to stay in the current fee-for-service payment systems, their incentive to take a risk on a new system will be limited—and only providers who expect that they will fare better financially under the new payment method will volunteer. As a result, all other things being equal, voluntary payment reform could increase, not decrease, Medicare expenditures. Steady pressure on unit prices under Medicare's current payment systems, coupled with appropriate redistribution of payments, will help address both of these challenges.

- ***The relative values used in Medicare's payment systems signal what the program values and can, by themselves, shape the delivery system.*** On the one hand, inappropriately high unit prices may encourage heavy investment in equipment (e.g., MRI or computed tomography scanners) or programs and facilities (e.g., cardiac specialty hospitals and programs) that institutional providers are then reluctant to abandon. In extreme cases, badly mispriced services may leave the program vulnerable to fraud and abuse. On the other hand, comparatively low unit prices may discourage providers from delivering certain services. Take, for example, the relatively low amount paid for primary care services as opposed to subspecialty services. The comparatively low compensation for primary care has contributed to the dramatic decline in the number of U.S. medical school graduates choosing careers in primary care.

In conclusion, changing Medicare's payment methods is essential to improving efficiency and value in health-care delivery. But such payment reform is unlikely to happen—or at least will not happen as quickly—without steady pressure on the level of prices paid by Medicare as well as attention to the relative values assigned to different services. We hope this report contributes to that effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Glenn M. Hackbarth". The signature is fluid and cursive, with the first name "Glenn" being more prominent and the last name "Hackbarth" following in a similar style.

Glenn M. Hackbarth, J.D.
Chairman

Enclosure

Acknowledgments

This report was prepared with the assistance of many people. Their support was key as the Commission considered policy issues and worked toward consensus on its recommendations.

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Executive summary

Executive summary

As required by the Congress, each March the Medicare Payment Advisory Commission reviews and makes recommendations for Medicare fee-for-service (FFS) payment systems and the Medicare Advantage (MA) program. In this report, we:

- Consider the context of the Medicare program in terms of its spending and the federal budget and national gross domestic product.
- Consider Medicare FFS payment policy in 2011 for: hospital inpatient, hospital outpatient, physician, ambulatory surgical center, outpatient dialysis, hospice, skilled nursing, home health, inpatient rehabilitation, and long-term care hospital.
- Discuss the status of the MA plans beneficiaries can join in lieu of traditional FFS Medicare and reiterate prior year payment recommendations.
- Review the status of the plans that provide prescription drug coverage.
- Respond to a congressional mandate to examine how to compare quality among MA plans and between those plans and traditional Medicare.

The goal of Medicare payment policy is to get good value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. Anything less does not serve the interests of the taxpayers and beneficiaries who finance Medicare through their taxes and premiums. Although this report addresses many topics to increase value, its principal focus is the Commission's recommendations for annual rate increases (updates) under Medicare's various FFS payment systems.

We recognize that managing updates and relative payment rates will not solve the fundamental problem with current Medicare FFS payment systems—that providers are paid more when they deliver more services without regard to the quality or value of those additional services. To address this problem directly, payment and delivery system reforms the Commission has discussed in the past such as medical homes, bundling, and accountable care organizations will have to be investigated and successful models adopted on a broad scale. That is unlikely to happen in the near term, however, because implementing comprehensive reform is complicated and may require

reorganization of the delivery of care—a complex and time-consuming activity in its own right.

In the interim, it is imperative that the current FFS payment systems be managed carefully. Medicare is likely to continue using its current payment systems for some years into the future. This fact alone makes unit prices—both their overall level and the relative prices of different services—an important topic. In addition, unit prices could affect the prospects for payment reform by eliminating unnecessary expenditures, providing an impetus for providers to volunteer for experiments with new payment methods, and shaping the delivery system by changing relative values.

Changing Medicare's payment methods is essential to improving efficiency and value in health care delivery. But such payment reform is unlikely to happen—or at least will not happen as quickly—without steady pressure on the level of prices paid by Medicare as well as attention to the relative values assigned to different services.

At the beginning of each chapter, we list the recommendations it contains. Within the chapters, we present each recommendation; its rationale; and its implications for beneficiaries, providers, and program spending. The spending implications are presented as ranges over one- and five-year periods and, unlike official budget estimates, do not take into account the complete package of policy recommendations or the interactions among them. In Appendix A, we list all recommendations and the Commissioners' votes.

Context for Medicare payment policy

The Medicare program and other United States health care payers are on an unsustainable financial path, as we discuss in Chapter 1. For most of the post-World War II period, health care costs have risen faster than the economy. CMS reports that health care's total share of the economy rose from 7 percent in 1970 to an estimated 17 percent in 2009. This high rate of growth is projected to continue, absent meaningful financing and delivery reforms.

A number of factors are responsible for the sustained high rates of growth in health care costs for public and private programs. The Congressional Budget Office cites advances in medical technology, national wealth, and the consumption-increasing effects of insurance as major

contributors to historic and projected growth. Other factors include changes in demographics and disease burden, rising personal incomes, and increases in prices charged by providers.

Rising spending places an increased burden on those who fund it. Higher premiums for health care benefits have resulted in increased employee benefit costs eclipsing wage increases; in effect, workers are receiving smaller increases in cash salaries in exchange for increases in insurance benefits. For Medicare beneficiaries, rising spending means that a growing share of their income must be used to pay Medicare premiums and cost sharing. Finally, for taxpayers the rising cost of Medicare and other federal health programs will require higher taxes and reduce the resources available for other federal priorities.

Studies show that much of the increase in health care spending is not explained by improvements in health status, clinical outcomes, or quality of life and that recommended clinical services are not always provided. These findings, combined with the projected increases in health spending, represent the core challenges for policymakers: how to increase quality, improve the efficiency of the delivery system, and find the resources to finance care.

Many of the barriers that prevent Medicare from improving quality and controlling costs stem from the incentives in Medicare's payment systems, which are primarily FFS and provide incentives that reward more services instead of better quality. Furthermore, Medicare's payment rates for individual products and services are not always accurate, leading to overpayments that do not encourage efficiency and may cause providers to prefer delivering overpriced services relative to others. Payments are based on the type and volume of services provided, and providers are not accountable for the quality of care they provide. Also, within the piecemeal FFS payment system there is no incentive for providers to coordinate care. Finally, Medicare providers and beneficiaries do not have the information they need to improve quality and use resources efficiently.

To begin to address these problems, the Commission has recommended a number of changes, such as rewarding providers for improving quality and holding providers accountable for the quality of care beneficiaries receive and the resources expended to provide it. The Commission is assessing approaches that revise the single-setting "silos" that are the unit of payment for most FFS payment

systems. These changes, with other changes to the delivery system that the Commission has recommended, aim to improve the quality of care and health outcomes by creating incentives for providers to work together.

Assessing payment adequacy and updating payments in fee-for-service Medicare

The Commission makes payment update recommendations annually for FFS Medicare. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a prospective payment system is changed. To determine an update, we first assess the adequacy of Medicare payments for efficient providers in the current year (2010). Next, we assess how those providers' costs are likely to change in the year the update will take effect (the policy year—2011). Finally, we make a judgment on what, if any, update is needed. When considering whether payments in the current year are adequate, we generally account for policy changes (other than the update) that are scheduled to take effect in the policy year under current law. This year, we make update recommendations in 10 FFS sectors: hospital inpatient, hospital outpatient, physician, ambulatory surgical center, outpatient dialysis, hospice, skilled nursing facility, home health, inpatient rehabilitation facility, and long-term care hospital. We discuss the analyses of payment adequacy for the first six sectors in Chapter 2 and for the four post-acute care sectors in Chapter 3.

Each year we look at all the indicators of payment adequacy and reevaluate any prior year assumptions using the most recent data available. The Commission's judgments about payment adequacy and expected cost changes result in an update recommendation for each payment system. In addition, in some cases the update may incorporate an allowance for productivity. Competitive markets demand continual improvements in productivity from workers and firms. These workers and firms pay the taxes used to finance Medicare. Medicare's payment systems should exert the same pressure on providers of health services. The Commission begins its deliberations with the expectation that Medicare should benefit from productivity gains in the economy at large (the 10-year average of productivity gains in the general economy, currently 1.3 percent). This factor links Medicare's expectations for efficiency to the gains achieved by the firms and workers who pay the taxes that fund Medicare. But the Commission may alter that expectation depending on the circumstances of a given set of providers in a given year.

Hospital inpatient and outpatient services

Medicare inpatient and outpatient FFS payments per beneficiary grew by 3.7 percent from 2007 to 2008, resulting in hospitals receiving approximately \$139 billion for inpatient and outpatient services. In aggregate, most indicators of payment adequacy are positive, but profit margins on Medicare patients remain negative for most of the 3,500 hospitals participating in the inpatient prospective payment system in 2008.

- Beneficiaries are gaining access to a broader array of services from a growing number of providers. Capacity continues to grow with more hospitals opening than closing for seven straight years. Hospitals report growth in the range of services they offer and in the number of health care workers they employ. Service volume continues to grow in the outpatient setting. Despite increasing competition from independent diagnostic testing facilities and ambulatory surgical centers, the volume of hospital outpatient services per Medicare FFS beneficiary has grown by more than 4 percent per year from 2003 to 2008. Part of the growth is due to a shift of services from the inpatient to the outpatient setting. Despite that shift, inpatient services per FFS beneficiary declined by an average of only 0.1 percent annually over the same five-year period.
- Quality continues to improve on most measures. Hospitals reduced 30-day mortality across all six conditions we monitor, process of care measures are improving, and patient satisfaction has improved. However, readmission rates remain unchanged, and indicators of patient safety show mixed results.
- Capital markets have been volatile over the past year. Credit markets froze in late 2008, but by late 2009 interest rates paid by hospitals had fallen and the monthly volume of bond offerings during 2009 has been roughly similar to the level in 2007.
- Medicare inpatient payments per discharge rose by 4.5 percent in 2008 while hospitals' costs grew 5.5 percent. Hospitals' profit margins on overall Medicare services (including inpatient, outpatient, skilled nursing, inpatient rehabilitation, and home health) declined from -6 percent in 2007 to -7.2 percent in 2008. Cost growth appears to have slowed in 2009 due to financial pressure from the recession but may return to trend in 2010.

A key question is whether Medicare payments are adequate to cover the costs of efficient providers. We find that Medicare payments on average do cover the costs of relatively efficient hospitals; however, we also find that most of these hospitals do not generate significant profits from serving Medicare beneficiaries.

The Commission recommends an update equal to the projected increase in the hospital market basket index (currently projected to be 2.4 percent) for inpatient and outpatient services, with this update implemented concurrently with a quality improvement program that would increase or decrease payments based on the quality of care provided. A hospital's quality performance would determine whether its payments increase more or less than the market basket increase.

To ensure that the aggregate level of hospital payments is correct, the update recommendation is coupled with a recommendation to correct for the effect of improved documentation and coding on Medicare payments. As expected, implementation of Medicare severity–diagnosis related groups (MS–DRGs) in 2008 gave hospitals a financial incentive to improve medical record documentation and diagnosis coding to more fully account for each patient's severity of illness. Documentation and coding improvements strengthen measurement of patient severity, but they also increase reported case mix under MS–DRGs without a real increase in patient severity or the resources hospitals must use to furnish inpatient care. To ensure that the transition to MS–DRGs is budget neutral, an offsetting adjustment must be applied to the Medicare base payment amounts to recover past overpayments and prevent future overpayments. We recommend spreading this budget-neutrality adjustment over several years.

Physician services

Physician services include office visits, surgical procedures, and a broad range of other diagnostic and therapeutic services furnished in all settings, not just physician offices. In 2008, the traditional FFS Medicare program spent about \$61 billion on physician services, accounting for 13 percent of total Medicare spending.

Most indicators of payment adequacy for physician services are positive and stable, suggesting that most beneficiaries can obtain physician care on a timely basis.

- Overall, beneficiary access to physician services is generally good and in several measures better than that reported by privately insured patients age 50 to 64.

Most beneficiaries are able to get timely appointments. Among the small share of beneficiaries looking for a new physician, most could find one; however, finding a primary care physician was more difficult than finding a specialist. Racial and ethnic minorities were more likely to experience access problems whether covered by Medicare or private insurance.

- A 2008 survey conducted by the Center for Studying Health System Change found that most physicians (74 percent) accepted all or most new Medicare patients in their practice. In our analysis of Medicare claims, we find 95 percent of physicians and other health professionals registered to bill Medicare had participation agreements with Medicare requiring them to accept Medicare's fee schedule amount for all Medicare patients.
- Service volume per beneficiary grew at a faster rate in 2008 than in 2007. Overall volume (reflecting both service units and intensity) grew 3.6 percent per beneficiary. Most of the claims-based ambulatory quality indicators that we examined for the elderly improved slightly or were stable from 2006 to 2008. Medicare's payment for physician services in 2008 was about 80 percent of private insurer payments, about the same levels it has been over the last decade.

In consideration of these factors, the Commission recommends that Medicare's payment for physician services be increased by 1.0 percent in 2011. However, the Commission is still concerned about the mispricing of services in the physician fee schedule and the inequity of a payment system that allows some physicians—often those in procedural specialties—to generate volume and revenue more readily than others. The Commission reiterates its earlier recommendations to increase payments for selected primary care services and plans future work on these issues.

Ambulatory surgical centers

Ambulatory surgical centers (ASCs) furnish outpatient surgical services to patients not requiring hospitalization and for which an overnight stay is not expected after surgery. In 2008, Medicare combined program and beneficiary spending on ASC services was \$3.1 billion, an increase of 9.7 percent per FFS beneficiary over 2007.

- Access to ASC care has generally been adequate. The number of Medicare-certified ASCs was about 5,200,

an increase of 3.7 percent over 2007, while volume increased 10.5 percent.

- ASCs' access to capital appears to be adequate as the number of ASCs has continued to increase.
- We do not have sufficient data to assess ASCs' quality of care because ASCs are not required to submit quality data in any form.

Considering these indicators, the Commission recommends a 0.6 percent increase to the payment rates for ASC services in calendar year 2011 concurrent with requiring ASCs to submit cost and quality data.

The projected change in providers' input prices is an important part of the Commission's annual update process. Due to concerns that the market basket index CMS uses to update ASC payments (the consumer price index for all urban consumers) may not reflect ASCs' input prices, we examined whether an alternative Medicare price index would better measure changes in ASC costs. Our analysis of ASC cost data from a 2004 survey indicates that ASCs appear to have a much higher share of expenses related to medical supplies and drugs than hospitals and physician offices, a much lower share of labor costs than hospitals, and a smaller share of all other costs than physician offices. Given these marked differences, the Congress should require ASCs to submit cost data to CMS, which should decide whether to use an existing Medicare price index as a proxy for ASC costs or to develop an ASC-specific market basket.

Outpatient dialysis services

Outpatient dialysis services are used to treat individuals with end-stage renal disease (ESRD). In 2008, about 330,000 beneficiaries were covered by Medicare and received dialysis from nearly 5,000 ESRD facilities. In that year, Medicare expenditures for outpatient dialysis services, including separately billable drugs administered during dialysis, were \$8.6 billion.

Our payment adequacy indicators for outpatient dialysis services are generally positive.

- Dialysis facilities appear to have the capacity to meet beneficiaries' demand. The growth in the number of dialysis treatment stations has generally kept pace with the growth in the number of dialysis beneficiaries, and the number of ESRD facilities

continues to increase. The few facility closures do not appear to disproportionately affect African Americans or beneficiaries dually eligible for Medicare and Medicaid.

- Since 1996, the number of dialysis treatments has kept pace with the growth in the number of beneficiaries. Statutory and regulatory changes that CMS implemented beginning in 2005 reversed spending trends for dialysis drugs. Although dialysis drug spending has decreased since 2004, our analysis suggests that the volume of drugs increased but at a slower rate than in previous years.
- Dialysis quality has improved over time for some measures, such as the use of the recommended type of vascular access—the site on the patient’s body where blood is removed and returned during dialysis. Other measures suggest that improvements in quality are still needed. In particular, the proportion of all dialysis patients registered on the kidney transplant waiting list remains low and rates of hospitalization and mortality remain high.
- Information from investment analysts suggests that access to capital for dialysis providers continues to be adequate. The number of facilities, particularly for-profit facilities, continues to increase.

In 2008, the Medicare margin for composite rate services and dialysis drugs for freestanding facilities was 3.2 percent. We project the Medicare margin for freestanding dialysis facilities will be 2.5 percent in 2010. This projection does not take into account the 2 percent reduction in total spending that the Medicare Improvements for Patients and Providers Act of 2008 mandated to begin in 2011 under the new dialysis payment method because: (1) the regulatory provisions to implement the new payment method are not finalized and (2) providers’ response to the new payment method is unknown. Including drugs and services that Medicare now separately pays for may lead to improvements in the efficiency of care.

Our analysis suggests that a moderate update of the composite rate is in order. Therefore, the Commission recommends updating the composite rate for calendar year 2011 by the projected rate of increase in the ESRD market basket less the Commission’s adjustment for productivity growth.

Hospice

The Medicare hospice benefit covers palliative and support services for beneficiaries with a life expectancy of six months or less who choose to enroll in the benefit. In 2008, more than 1 million Medicare beneficiaries received hospice services from more than 3,300 providers and Medicare expenditures exceeded \$11 billion.

Overall, the indicators of payment adequacy for hospices are generally positive:

- Hospice use among Medicare decedents has grown substantially in recent years, suggesting greater awareness of and access to hospice services. Hospice use increased across all demographic and beneficiary characteristics examined. Despite this growth, use remained lower among racial and ethnic minorities. The supply of hospices grew substantially (47 percent) from 2000 to 2008—almost all new hospices were for-profit providers. Medicare spending on hospice services nearly quadrupled between 2000 and 2008, reflecting more beneficiaries enrolling in hospice and longer lengths of stay.
- We do not have sufficient evidence to assess quality, as information on quality of care is very limited. Efforts to provide a pathway for further development of quality measures are ongoing.
- Hospices are not as capital intensive as most other provider types because they do not require extensive physical infrastructure. Evidence suggests that access to capital is favorable for large publicly traded hospice companies, for-profit freestanding hospices, and hospital-based and home-health-based hospices. Access to capital for nonprofit freestanding hospices is difficult to discern.
- The aggregate Medicare margin was 5.9 percent in 2007. We project that the aggregate margin will be 4.6 percent in 2010. These margin estimates exclude the costs of bereavement services (about 1.5 percent of total costs), which are not reimbursable by Medicare.

The Commission concludes that hospice providers can operate within the current payment system with a moderate update. We therefore recommend that the Congress update payment rates for hospice services by the hospital market basket index, less the Commission’s adjustment for productivity growth.

Post-acute care providers: An overview of issues

In Chapter 3 we discuss the Commission's assessment of the adequacy of Medicare's payments in each post-acute care sector (skilled nursing facility, home health, inpatient rehabilitation facility, long-term care hospital). We first note four common themes across the sectors:

- Payments are not accurately calibrated to costs in each sector.
- Services overlap among settings.
- The post-acute care product is not well defined.
- Assessment instruments differ among settings.

Refining the prospective payment systems (PPSs) and their case-mix systems will not resolve issues of whether patients go to the lowest cost, appropriate post-acute setting or whether they need post-acute care at all. Some patients might recover and recuperate at home using outpatient services or might do better by staying a few more days in the acute care hospital. Medicare would also want to make sure that beneficiaries receive the most clinically appropriate and effective care, regardless of the setting.

To this end, the Commission is looking beyond payment adequacy to think more broadly about how to match patients who use post-acute care with the set of services that can provide the best outcomes at the lowest cost. Building on past Commission work, in Chapter 3 we discuss two possible next steps. First, CMS could implement readmission policies for all post-acute care settings so that providers' incentives are aligned and they share the responsibility for avoiding unnecessary rehospitalizations. Second, CMS could establish a pilot to test the concept of bundling payments around a hospitalization for select conditions and include post-acute care in those bundles. Bundling payments represents a bigger step toward aligning financial incentives and provider responsibility for patient outcomes across settings.

Skilled nursing facility services

Skilled nursing facilities (SNFs) furnish short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. Most SNFs are part of nursing homes that furnish long-term care, which Medicare does not cover. In 2008, about 15,000 SNFs furnished covered care to 1.6 million beneficiaries. In 2009, Medicare spending on SNF care was \$25.5 billion.

Most indicators of payment adequacy for SNFs are positive.

- Access to SNF services remains good for most beneficiaries but certain subgroups of beneficiaries—those with medically complex care needs and members of racial minorities—warrant further analysis. Days and admissions on a per FFS beneficiary basis increased slightly between 2007 and 2008, suggesting that access was maintained, but, since 2003, the share of SNFs admitting medically complex patients decreased.
- SNF quality of care shows mixed results since 2000. Between 2006 and 2007, the risk-adjusted rates of community discharge increased to reach the highest level since 2000, while potentially avoidable rehospitalizations have steadily risen, although the most recent increase was minimal.
- Because most SNFs are part of a larger nursing home, we examine nursing homes' access to capital. Access to capital improved over the last year but the lending terms are stricter and owners and operators are more carefully screened than in the past. Uncertainties in lending do not center on the adequacy of Medicare payments: From all accounts, Medicare remains a sought-after payer.
- Increases in payments between 2007 and 2008 outpaced increases in provider costs, reflecting the continued concentration of days in the highest payment case-mix groups. In 2008, the average Medicare margin for freestanding SNFs was 16.5 percent. We project a Medicare margin for 2010 of 10.3 percent. Financial performance continued to differ substantially across the industry—a function of distortions in the PPS and cost differences of providers. Compared with SNFs with relatively low margins, SNFs with the highest margins had higher shares of days in intensive rehabilitation case-mix groups and lower shares of days in the medically complex groups. Our previously recommended changes to the PPS design would, if implemented, narrow the differences in financial performance across the industry.

In light of these findings, the Commission recommends a zero update for 2011 and reiterates its prior recommendations on SNF PPS design and pay for performance.

Home health services

Home health agencies provide services to beneficiaries who are homebound and need skilled care (nursing or therapy). In 2008, about 3.2 million beneficiaries received home health services from about 10,000 home health agencies under the Medicare benefit. Medicare spent \$16 billion on home health services in 2008.

The indicators of payment adequacy for home health are mostly positive:

- Access to home health is widespread, with 99 percent of beneficiaries living in a ZIP code where a Medicare home health agency operates. The number of agencies continues to increase, with about 500 new agencies in 2009. Most new agencies since 2002 are in Texas, Florida, and Michigan. There are concerns that growth in certain areas, including Miami–Dade County, Florida, is related to increased fraud and abuse activity by some providers. The volume of services continues to rise. More beneficiaries are receiving home care, and the number of episodes per beneficiary continues to rise.
- The Home Health Compare measures for 2009 are similar to those for previous years, showing improvement in the functional measures and mostly unchanged rates of adverse events. However, the Commission has concerns about the current measures and believes further study is needed before it can draw definitive conclusions about quality.
- Home health agencies are smaller and do not have the capital-intensive needs found in most other health care sectors. According to capital market analysts, the major publicly traded for-profit home health companies have access to capital markets for their credit needs. For smaller agencies, the significant number of new agencies in 2009 suggests that they have access to capital necessary for start-up.
- Payments have consistently and substantially exceeded costs in the home health PPS. Medicare margins in 2008 were 17.4 percent. For 2010, the Commission projects margins of 13.7 percent.

Taking into consideration the generally positive indicators of payment adequacy, the Commission has concluded that home health payments need to be significantly reduced. To start with, the Commission recommends a zero update for 2011 and that the Congress direct the Secretary to rebase

rates for home health care services to reflect the average cost of providing care.

In addition, efforts need to be made to strengthen quality measurement and program integrity. The Commission recommends that the Congress should direct the Secretary to expeditiously modify the home health payment system to protect beneficiaries from stinting or lower quality care in response to rebasing. The approaches should include risk corridors and blended payments that mix prospective payment with elements of cost-based reimbursement. The Secretary should also identify categories of patients who are likely to receive the greatest clinical benefit from home health and develop outcomes measures that evaluate the quality of care for each category of patient. Finally, the Congress should direct the Secretary to review home health agencies that exhibit unusual patterns of claims for payment and provide the Secretary with the authority to implement safeguards—such as a moratorium on new providers, prior authorization, or suspension of prompt payment requirements—in areas that appear to be high risk.

Inpatient rehabilitation facility services

More than 330,000 Medicare FFS beneficiaries received care in inpatient rehabilitation facilities (IRFs) in 2008. Between 2007 and 2008, Medicare FFS expenditures for IRF services declined from \$5.95 billion to \$5.84 billion, largely due to declines in FFS enrollment and a small decline in IRF utilization. FFS spending on IRF services is projected to decrease slightly in 2009 and increase from 2010 onward as Medicare FFS enrollment growth accelerates.

Our indicators of Medicare payment adequacy for IRFs are generally positive.

- Our measures of beneficiary access to care suggest that beneficiaries have sufficient access to IRF services. After declining slightly in 2006 and 2007, the supply of IRFs was unchanged in 2008. The IRF occupancy rate was 62 percent in 2008. The stability in provider supply and low occupancy rate suggest that capacity remains adequate to meet demand. In 2008, the proportion of Medicare FFS beneficiaries admitted to IRFs decreased slightly by 0.6 percent. Our assessment of hospital discharge patterns to post-acute care suggests that beneficiaries who were not admitted to IRFs as a result of the 2004 CMS compliance threshold were able to obtain

rehabilitation care in other settings, such as SNFs and home health.

- From 2004 to 2009, IRF patients' functional improvement between admission and discharge has increased, suggesting improvements in quality. However, changes over time in patient mix make it difficult to draw definitive conclusions about quality trends.
- Credit markets have begun to ease relative to the credit crisis of 2008 and are operating in a more normal manner. Both hospital-based units, through their parent institutions, and chains of freestanding facilities exhibit continued access to capital. We are not able to determine the ability of independent freestanding facilities to raise capital.
- Growth in cost per case has slowed since 2007 but continues to grow faster than payments. Nevertheless, the IRF aggregate Medicare margin for 2008 was 9.5 percent. We project that this figure will fall to 5.0 percent in 2010. To the extent that IRFs restrain their cost growth in response to fiscal pressure, the projected 2010 margin could be higher than we have estimated.

On the basis of our analyses, the Commission concludes that IRFs will be able to accommodate cost changes in fiscal year 2011 at current payment levels and recommends a zero update. We will closely monitor payment update indicators to reassess our update recommendation for the next fiscal year.

Long-term care hospital services

Long-term care hospitals (LTCHs) furnish care to patients with clinically complex problems—such as multiple acute or chronic conditions—who need hospital-level care for relatively extended periods. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay greater than 25 days for its Medicare patients. Medicare is the predominant payer for LTCH services, accounting for about two-thirds of LTCH discharges. In 2008, Medicare spent \$4.6 billion on care furnished in the just under 400 LTCHs nationwide. About 115,000 beneficiaries had almost 131,000 LTCH stays.

Our payment adequacy indicators for LTCHs suggest that they are able to operate within the current payment system.

- The Medicare, Medicaid, and SCHIP Extension Act imposed a three-year limited moratorium on new LTCHs and new beds in existing LTCHs. Controlling for change in the number of FFS beneficiaries, we found that the number of LTCH cases rose 3.6 percent between 2007 and 2008, suggesting that access to care was maintained during that period.
- LTCHs do not submit quality data to CMS. Existing measures of quality are not reliable for LTCHs, and new ones need to be developed. Analyzing unadjusted aggregate trends in in-facility mortality, mortality within 30 days of discharge, and readmission to acute care, we find that, across all diagnoses, rates of death and readmission have remained stable and readmission rates have been stable or declining for the most frequently occurring LTCH diagnoses. The Commission is planning to explore the feasibility of developing meaningful quality measures for LTCHs and the data needed for measurement.
- Relatively little equity has been raised by LTCH chains in recent months. This situation is likely due, at least in part, to the moratorium on new LTCHs, which has reduced opportunities for expansion and therefore reduced the need for capital.
- Between 2007 and 2008, spending per FFS beneficiary climbed 4.7 percent. Over the same period, costs per case grew 2.1 percent. The 2008 Medicare margin for LTCHs was 3.4 percent. We estimate LTCHs' aggregate Medicare margin will be 5.8 percent in 2010.

Taking into account these findings, the Commission recommends a zero update to payment rates for LTCH services for rate year 2011.

The Medicare Advantage program

The Medicare Advantage (MA) program allows Medicare beneficiaries to receive benefits from private plans rather than from the traditional FFS program. The Commission supports private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and the alternative delivery systems that private plans can provide. Private plans have greater potential to innovate and to use care management techniques and, if paid appropriately, would have more incentive to do so.

The Commission also supports financial neutrality between FFS and the MA program. Financial neutrality means that the Medicare program should not pay MA plans more than it would have paid for the same set of services under FFS. Currently, Medicare spends more under the MA program than under FFS for similar beneficiaries. This higher spending results in increased government outlays and higher beneficiary Part B premiums (including higher premiums for beneficiaries in FFS) at a time when both the Medicare program and its beneficiaries are under increasing financial stress.

In Chapter 4 we report that most indicators of program performance—enrollment, plan availability, and quality of care—are generally positive or stable, but another measure—costliness—precludes MA from achieving its goal to be efficient relative to FFS. MA enrollment continued to grow through 2009. Compared with 2008, when 22 percent of beneficiaries were enrolled in MA plans, as of November 2009, 24 percent of Medicare beneficiaries—10.9 million—were enrolled in nearly 4,890 MA plans. Payments to MA plans increased from \$93 billion in 2008 to \$110 billion in 2009. This amount represents 26 percent of all Medicare expenditures in 2009. In 2009, Medicare spent roughly \$14 billion dollars more for the beneficiaries enrolled in MA plans than it would have spent if they had stayed in FFS Medicare. To support the extra spending, Part B premiums were higher for all Medicare beneficiaries (including those in FFS). CMS estimated that the Part B premium was \$3.35 per month higher in 2009 than it would have been if spending for MA enrollees had been the same as in FFS.

In 2010, an MA plan of some type is available to all Medicare beneficiaries and a coordinated care plan is available to almost all. Eighty-five percent of beneficiaries have access to an MA plan that includes Part D drug coverage and has no premium (beyond the Medicare Part B premium), and access to MA special needs plans is greater than in 2009. On average, beneficiaries can choose from 21 different plans in their county of residence. MA payments will continue to exceed Medicare FFS spending for similar beneficiaries in 2010, although by less than in 2009. MA plans will continue to provide enhanced benefits but at a high cost to the Medicare program.

Status report on Part D

Part D of Medicare provides an outpatient prescription drug benefit through the use of competing private plans.

In Chapter 5 we examine several indicators of beneficiary access and program spending.

In early 2009, about 90 percent of the 45 million Medicare beneficiaries had Part D drug coverage or its equivalent—about 59 percent were enrolled in Part D plans and 31 percent had other sources of creditable coverage. About 10 percent had no drug coverage or coverage less generous than Part D. Among those in Part D plans, nearly 10 million low-income individuals (21 percent of all Medicare beneficiaries) received extra help with premiums and cost sharing through the low-income subsidy (LIS). Roughly two-thirds of Part D enrollees are in stand-alone prescription drug plans (PDPs); the rest are in MA–Prescription Drug plans (MA–PDs).

- Sponsors are offering about 7 percent fewer PDPs in 2010 than in 2009, but beneficiaries will continue to have from 41 to 55 PDP options to choose among, along with many MA–PDs. For 2010, sponsors are tightening benefit designs for PDPs with respect to deductibles and gap coverage while keeping largely the same structure for MA–PDs.
- Part D enrollees in 2010 are paying, on average, \$30.52 per month, up less than \$2.00 (6 percent) from 2009. In 2010, the average PDP enrollee pays \$37.67 per month, and the average MA enrollee pays \$13.99 per month.

CMS sets a maximum amount in each region that Medicare will pay for extra help with premiums through the LIS. If a plan's premium is below that threshold, LIS enrollees pay no premium. In 2010, about the same number of such PDPs met this criterion as in 2009 (307), and each region has at least four such PDPs. CMS needed to reassign an estimated 1.06 million LIS enrollees to plans offered by a different sponsor because their previous plan's premium did not fall below the 2010 threshold.

The Medicare trustees estimate Part D spending was \$53 billion in 2009, \$4 billion more than in 2008. Part D's LIS became the largest component of Part D spending in 2008 and continues to be in 2009. The fastest growing component of Part D is Medicare's reinsurance payments for the highest spending enrollees, due in part to the difficulty of negotiating rebates for high-cost drugs and biologics that have few competing therapies.

CMS publishes 19 performance metrics aggregated into a 5-star rating system through the Medicare Prescription Drug Plan Finder at www.medicare.gov. Currently, two

metrics address patient safety, while the rest focus on customer service and enrollee satisfaction. For 2010, CMS has set more requirements addressing how sponsors operate, monitor, and report on their plans' medication therapy management programs.

Report on comparing quality among Medicare Advantage plans and between Medicare Advantage and fee-for-service Medicare

In recent years, the Commission has made a number of recommendations on quality reporting and quality-related payment adjustments in both the MA and traditional Medicare FFS programs. In response to a congressional mandate, in Chapter 6 we make additional recommendations on quality measurement and reporting in Medicare. Specifically, Section 168 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) requires the Commission to submit a report to the Congress by March 31, 2010, about measures for comparing quality and patient experience in the MA and FFS programs, with the goal of collecting and reporting such measures by the year 2011. MIPPA requires that the report:

- address methods for comparing quality among MA plans as well as between the MA and FFS programs,
- address issues in public reporting and benchmarking, and
- include recommendations for legislative or administrative changes as the Commission finds appropriate.

Any changes the Commission recommends in March 2010 would have to be implemented immediately for collection and reporting of measures in 2011. CMS, health plans, and other entities need as much lead time as possible to implement changes and to be prepared for data collection and reporting in that one-year time frame. Thus, we have taken an incremental approach, building on current measurement systems and data sources to improve quality comparisons in the short term—by 2011. For the longer term—that is, by 2013 and beyond—we recommend ways to expand current reporting to encompass Medicare FFS and to fill in gaps in the current measurement sets, including the use of outcome measures to compare MA and FFS in local geographic areas. We also recommend leveraging the capabilities and increased use of health information technology, which will be supported by Medicare payment incentives beginning in 2011, to facilitate improvements in quality measurement.

On the basis of our findings, the Commission makes recommendations that address the use of electronic health records, the geographic unit of analysis for quality comparisons, uniformity in quality data reporting requirements, comprehensiveness of quality measures, and the issue of whether there are sufficient dedicated resources for CMS. Although the resources required to implement these recommendations are likely to be substantial, we believe it is important to beneficiaries, providers, and policymakers that comparisons on quality be as accurate and reliable as possible. The unintended consequences of incomplete or flawed comparisons would be detrimental to the goal of improving quality across Medicare. ■

CHAPTER

1

Context for Medicare payment policy

Context for Medicare payment policy

Chapter summary

The Medicare program and other United States health care payers are on an unsustainable financial path. For most of the post-World War II period, health care costs have risen faster than the economy has grown for both the public and private sectors (2000 Technical Review Panel on the Medicare Trustees Report 2000). Medicare's share of the nation's gross domestic product (GDP) rose from slightly less than 1 percent in 1975 to about 3 percent in 2009. Health care's total share of the economy increased from 7 percent in 1970 to an estimated 17 percent in 2009 (Centers for Medicare & Medicaid Services 2009). This high rate of growth is projected to continue, absent meaningful financing and delivery reforms.

A number of factors are responsible for the sustained high rates of growth in health care costs for public and private programs. Advances in medical technology, national wealth, and the consumption-increasing effects of insurance are cited as major contributors to historic and projected growth (Congressional Budget Office 2007). Other factors include changes in demographics and disease burden, rising personal incomes, and increases in prices charged by providers.

Rising spending places an increased burden on those who fund health care programs. As most individuals under age 65 receive health care through an employer, higher premiums for health care benefits have resulted in employee

In this chapter

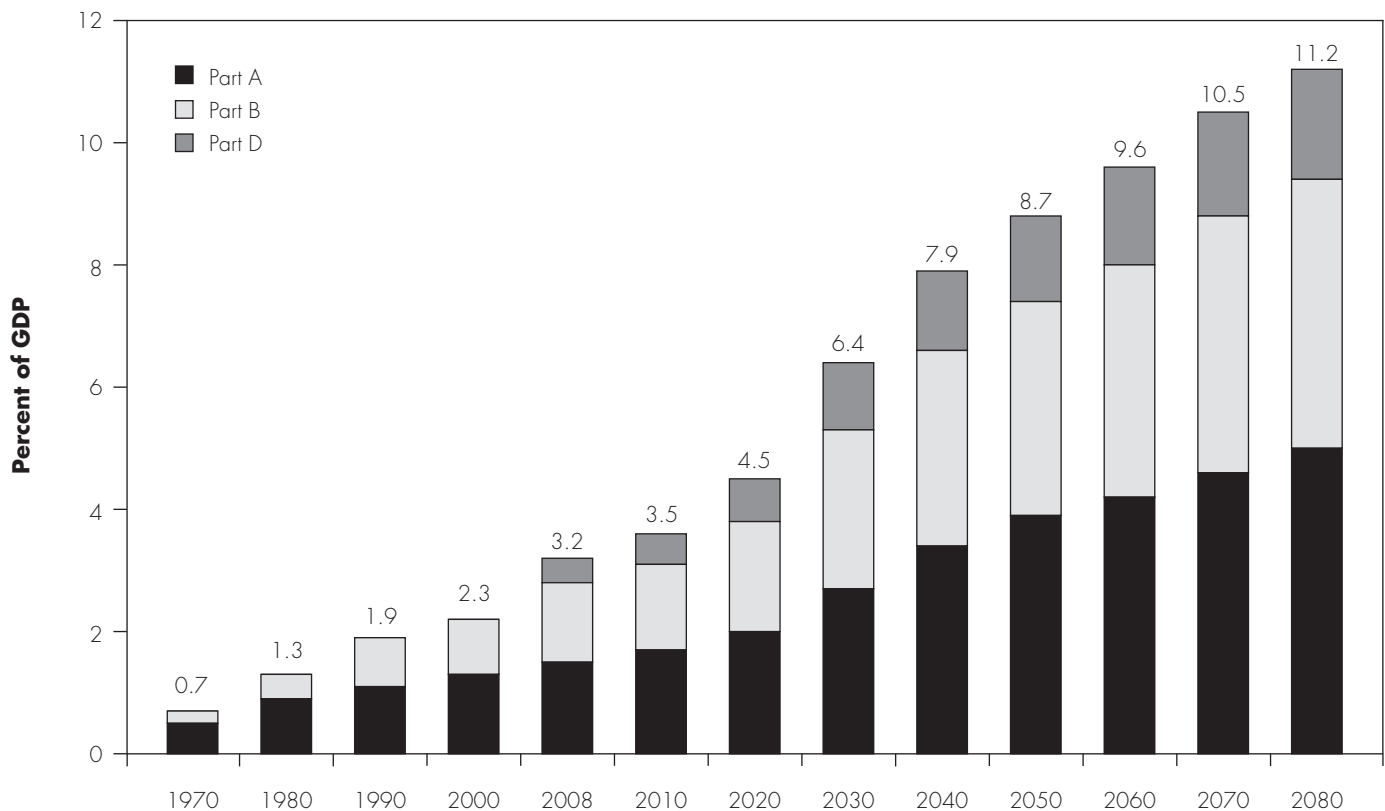
- Trends in growth in United States health care spending
- Consequences of rapid growth in spending for Medicare and health care system

benefit costs eclipsing wage increases (Claxton et al. 2007). In effect, workers are receiving smaller increases in cash salaries in exchange for increases in noncash insurance benefits. For Medicare beneficiaries, rising spending means that a growing share of their income must be used to pay Medicare premiums and cost sharing. Finally, for taxpayers the rising cost of Medicare and other federal health programs will require higher taxes and reduce the resources available for other federal priorities.

Studies show that much of the increase in health care spending is not explained by improvements in health status, clinical outcomes, or quality of life; studies also indicate that recommended clinical services are not always provided (Baicker and Chandra 2004, Fisher et al. 2003a, McGlynn et al. 2003). These findings, combined with the projected increases in health spending, represent the core challenges for policymakers: how to increase quality, improve the efficiency of the delivery system, and find the resources to finance care.

Many of the barriers that prevent Medicare from improving quality and controlling costs stem from the incentives in Medicare's payment systems, which are primarily fee-for-service (FFS) and provide incentives that reward more services instead of better quality. Furthermore, Medicare's payment rates for individual products and services are not always accurate, leading to overpayments that do not encourage efficiency and may cause providers to prefer delivering overpriced services relative to others. Payments are based on the type and volume of services provided, and providers are not accountable for the quality of care they provide. Also, within the piecemeal FFS payment system there is no incentive for providers to coordinate care. Each provider may treat one aspect of a patient's care with little regard to what other providers are doing, which can result in duplicate efforts or gaps in care. Finally, Medicare providers and beneficiaries do not have the information they need to improve quality and use resources efficiently.

To begin to address these problems, the Commission has recommended a number of changes, such as rewarding providers for improving quality and holding providers accountable for the quality of care beneficiaries receive and the resources expended to provide it. Current payment systems do not encourage the coordination of care or efficient use of resources in an episode. To address this problem, the Commission is assessing approaches that revise the splintered single-setting "silos" that are the unit of payment for most FFS payment systems. These changes, with other changes to the delivery system that the Commission has recommended, aim to improve the quality of care and health outcomes by creating incentives for providers to work together. ■

**FIGURE
1-1****Trustees project Medicare spending to increase as a share of GDP**

Note: GDP (gross domestic product). These projections are based on the trustees' intermediate set of assumptions.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

Introduction

Medicare fills an important role by ensuring that the elderly and disabled have access to medically necessary care and that they have some financial protection against health costs. Medicare is credited with doubling the share of seniors who have health insurance and reducing the out-of-pocket burden beneficiaries would otherwise face (Moon 2000). A consensus exists among Americans that these beneficial aspects of the Medicare program must be preserved. At the same time, however, Medicare costs have grown substantially over the last decade and will continue to grow in the future, placing an increasing burden on taxpayers and beneficiaries (Figure 1-1).

Medicare and the United States health care system

In 2008, Medicare spending was estimated to be \$468 billion (Boards of Trustees 2009). The program is just one part of an expansive and growing United States health care system that includes a broad array of private and public purchasers, insurers, providers, manufacturers, and suppliers (see text box on public and private financing of care, p. 22). In 2007, combined expenditures on health care services in the United States totaled nearly \$2.2 trillion, or 16 percent of our economy (Hartman et al. 2009) (Table 1-1, p. 6, and Figure 1-2, p. 10).

Medicare and most other health care payers share a common set of providers to deliver services to their

Spotlight issue: Effects of payment levels on hospitals' costs

Since Medicare is not the only program most providers serve, the adequacy of payments from other payers can influence provider costs and financial performance. Intrinsic to this concept is the notion that providers' costs are partially within providers' control and subject to change given the proper incentives. Medicare attempts to encourage providers to control costs through its payment mechanisms, but revenue from other payers can influence how providers manage costs.

Some hospitals and private payers have argued that hospitals must charge private insurers high rates to compensate for what they perceive as inadequate reimbursements from their public payers—Medicare and Medicaid. They assert that low Medicare rates force hospitals to shift a portion of the costs of providing care to Medicare patients onto private payers. However, this theory makes several assumptions about hospital costs that are inconsistent with the economic incentives of providers and payers and does not

take into account relationships between payers and providers that vary among health care markets. In some markets—especially those that have experienced significant provider consolidation and integration—providers may have sufficient market power to negotiate high rates from payers. In other markets, however, payers may be more dominant and generally define the payment rates that providers are obligated to take. Further, the Commission's analysis of variability in hospitals' costs as a function of payer mix and payment rates suggests that an alternative explanation for cost variation may be more appropriate.

With respect to the assertion that providers charge private payers higher prices because of lower Medicare payments, it is not clear why providers and payers seeking to maximize financial performance would consider the level of Medicare payment in their negotiations. Typically, reimbursement rates would reflect each party's market power. If a hospital seeking to maximize profit or revenue had sufficient

(continued next page)

**TABLE
1-1**

Public and private sources of funds for health care, 2007

Category	Spending (billions)	Percent
Private funds:	\$1,206	54%
Consumer out-of-pocket	269	12
Private health insurance	775	35
Other private funds	162	7
Public funds:	1,035	46
Medicare	431	19
Other federal programs	137	6
Medicaid	329	15
Other state and local programs	138	6
Total	2,241	100

Source: Centers for Medicare & Medicaid Services, Department of Health and Human Services 2009. National health accounts. http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp#TopOfPage.

beneficiaries. Linked in this way, the policies of one payer can affect others (see text box). But our delivery system is not a true system, under which payers and providers act in concert to ensure that high-quality care is efficiently delivered. Rather, providers usually act independently of one another, concerned with the patient only as long as he or she is in their care. Similarly, payers may act independently of each other, with payers adopting the policies of others when it is in their interest to do so, but often working implicitly or even explicitly at cross purposes (as exhibited in the tension between Medicare and Medicaid in paying for care provided to beneficiaries eligible for both programs).

Over the last several years, the Commission has expressed serious concerns about persistent gaps in care coordination for beneficiaries enrolled in traditional fee-for-service (FFS) Medicare (Medicare Payment Advisory Commission 2004, Medicare Payment Advisory Commission 2006, Medicare Payment Advisory Commission 2007). Providers

Spotlight issue: Effects of payment levels on hospitals' costs (cont.)

market power to do so, the hospital would seek the highest price it could achieve, regardless of the level of Medicare payment. Conversely, the rate a private payer is willing to set should reflect its market power and its ability to pay, and it should seek the lowest rate possible to minimize its cost. If providers can negotiate higher prices with non-Medicare payers, it is because of their market power and not the level of Medicare payment.

It should not be surprising that private-payer payment rates are higher than Medicare's rates in many markets, as there is evidence that the consolidation in the supply of hospitals in many markets has given them significant market power over private payers. This leverage means that, unlike a competitive market, hospitals will be able to demand payments in excess of an efficient provider's costs. The leverage to secure higher rates from non-Medicare payers may result in less fiscal pressure to control costs.

The idea that hospitals must shift some of Medicare patients' costs to private payers also assumes that hospitals' costs are static, and Medicare payments are too low to cover them. The Commission found significant variation among hospitals in cost per discharge, even when controlling for differences such as patient severity, wages, and prices (Medicare Payment Advisory Commission 2009c). This variation for equivalent patients suggests that costs for some

hospitals may not reflect an optimum level of efficiency, and some hospitals are better at controlling costs than others. For those with significant losses on Medicare, these losses may be a result of their relatively high costs.

In our March 2009 report, the Commission conducted an empirical analysis to identify the factors affecting hospital financial performance under Medicare and private payers. Contrary to the theory professed by some hospital advocates, we did not find that hospitals must shift costs to private payers to compensate for inadequate Medicare payments. Rather, we found that hospitals' profitability under Medicare is a function of their costs and that their costs varied as a function of the level of their non-Medicare payments (see Chapter 2A). Specifically, hospitals under high financial pressure (that is, hospitals with low non-Medicare profit margins) tended to control their costs, and thus have better financial performance under Medicare, whereas those under low financial pressure (those with relatively high non-Medicare profit margins) had higher costs and lower or negative Medicare margins. As revenue rises from non-Medicare payers, the financial pressure the hospital is under declines, costs increase, and Medicare margins fall, putting pressure on policymakers to increase Medicare rates. Rather than reflecting inadequate Medicare payments, these losses may reflect inadequate cost control. ■

may provide quality care to uphold professional standards and to have satisfied patients, but Medicare does not hold them accountable for the quality of care they provide. Moreover, providers are not accountable for the full spectrum of care a beneficiary may use, even when they make the referrals that dictate resource use. For example, physicians ordering tests or hospital discharge planners recommending post-acute care do not have to consider the quality of outcomes or the financial implications of the care that other providers may furnish. This fragmentation of care puts quality of care and efficiency at risk.

A case also exists for coordination among payers in addressing common reform challenges. For example, coordination of Medicare and Medicaid in the care of dual-eligible beneficiaries would reduce the incentives for one payer to push costs onto the other (e.g., through state strategies to maximize Medicare reimbursements for dual eligibles). Payers control the incentives faced by providers and beneficiaries, and achieving the full potential of some reforms may require cooperation among payers (see text box, pp. 8–9). Given that payers are responsible for different populations, not all of payers' interests may overlap. However, when common interests can be

Spotlight issue: Need for greater coordination among payers

Though each sector can affect the other, Medicare and other payers have not developed mechanisms for coordinating efforts to improve the health care system. In some areas, it may be possible to achieve better results if Medicare and other large purchasers of care cooperate in the development of reforms. Cooperation could include payers sharing data on health care service use and clinical outcomes. This type of analysis could be used to identify effective and ineffective treatments, and pooling data from multiple payers would provide a larger sample and permit more rigorous analysis.

Coordination may also be necessary to ensure that delivery system reforms are coherent and effective. For example, uncoordinated pay-for-performance reforms from multiple payers could result in conflicting incentives, with providers disregarding them. Many payers' shares of individual provider revenues are too small for them to significantly influence provider behavior. For example, Medicare accounted for only 20 percent of expenditures for physician services,

while private insurers accounted for 50 percent divided among numerous separate insurers.

Accountable care organizations (ACOs) are one example of a policy that may benefit from coordination with private payers (Medicare Payment Advisory Commission 2009a). ACOs are organizations of providers that agree to be at risk for the cost and quality of care they provide to their patients, with their payments adjusted through a system of bonuses and penalties that are applied depending on whether the ACO achieved or failed to meet specified performance. If Medicare established ACOs, but private payers continued to pay based on fee-for-service, the incentives for ACOs to lower costs by restraining the volume of services would be diminished. Conversely, incentives for providers in the ACO could be strengthened if private payers joined Medicare in paying based on ACO performance. By coordinating incentives, payers can ensure consistency in the care expected of providers and reap the financial leverage of involving multiple payers.

(continued next page)

identified, joint efforts at reform by payers may have more impact than separate uncoordinated efforts.

Comparing spending levels in the United States and other countries

Health care spending in the United States is far higher than in other countries—about \$7,290 per person in 2007, or more than twice the median of member countries of the Organisation for Economic Co-operation and Development (OECD) (Organisation for Economic Co-operation and Development 2009).¹ The United States spends significantly more than other high-spending OECD countries, with the next highest spending nation spending 35 percent less per capita.

Various studies seek to explain higher United States spending relative to other nations. Some have suggested that the rates of diagnosis and treatment for many common

conditions are much higher in the United States (Thorpe et al. 2007), while others contend that lower prices in other countries are a major reason for higher United States spending (Anderson et al. 2003). Still another study found that the United States has higher spending even after adjusting for differences in wealth and disease prevalence (McKinsey Global Institute 2007).

Comparisons of quality of care and spending have generally found that the United States does not achieve better outcomes than other industrialized nations, even though it spends more (Organisation for Economic Co-operation and Development 2004, Schoen et al. 2008). For example, surveys that have compared quality of patient care in the United States and six other countries found that patient satisfaction and access to care varied, and no country clearly outperformed the others (Schoen et al. 2007). Among clinical conditions, the results are mixed

Spotlight issue: Need for greater coordination among payers (cont.)

Another advantage of coordination would be to minimize the burden of reforms on providers. Common approaches to defining conditions and quality measures would reduce the cost and administrative complexity of collecting performance information. The Commission has suggested that Medicare establish a formal process composed of private and public sector participants to streamline, update, and improve measures sets. This process should help decrease the burden of quality reporting by coordinating Medicare's efforts with other payers seeking similar information (Medicare Payment Advisory Commission 2005b).

Identifying areas of mutual concern is critical to realizing coordinated approaches among payers. Because payers finance care for different populations payers' needs are not always the same. For example, Medicare serves mostly elderly patients, and quality measures that are most relevant for this population may not be the best for the populations served by other payers. Payers may differ on how to use some incentives and reforms. The use of pooled data to study clinical outcomes could be undermined if

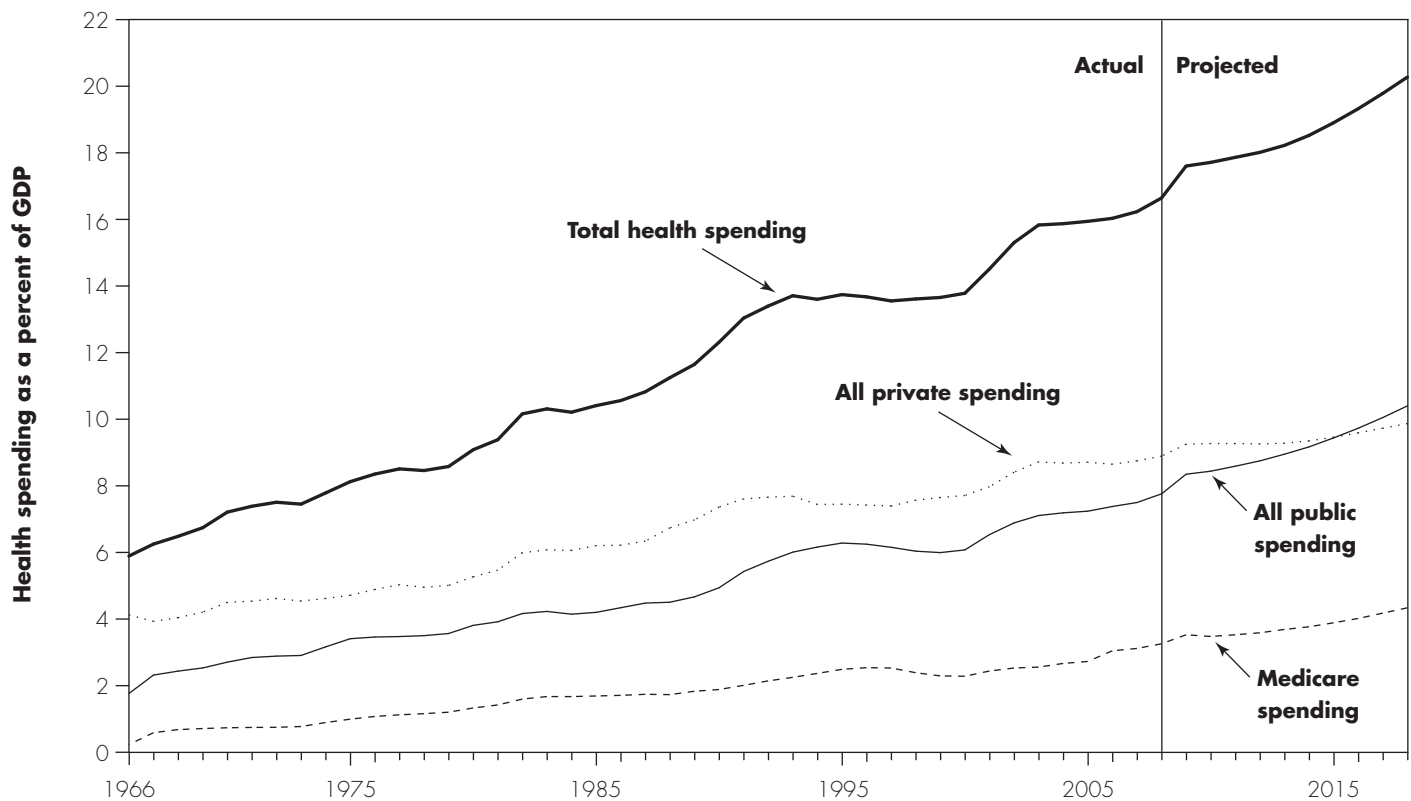
payers reach different conclusions because of different analytic methodologies.

There are several potential areas for Medicare to attempt coordinated efforts at reform with private payers. Medicare frequently conducts demonstrations to test new approaches to paying for health care services; in the future the private payers could join in these efforts to provide greater leverage to Medicare's efforts. Another area of potential integration includes beneficiaries who are dually eligible for Medicare and Medicaid (Medicare Payment Advisory Commission 2008a). Financing care for these beneficiaries is split between state and federal governments, and delivering care more efficiently for this population could benefit the treasury of both groups. The Commission recommended that special needs plans (SNPs) in Medicare Advantage that enroll only dual eligibles be used as a means to integrate financing and care for this population. This integration could take several forms and would not necessarily require that the SNP accept capitated rates from Medicaid. ■

as well. For example, the survival rates for many types of cancers are higher in the United States than in Europe, while the rate of mortality for conditions considered amenable to prevention through effective care is higher in the United States (Docteur and Berenson 2009). Given that countries vary significantly in the design of their health care systems and patient needs, it should not be surprising that quality comparisons are sensitive to the measures compared. However, it is striking that the United States underperforms on many quality measures relative to nations that spend less (Schoen et al. 2008). The comparison of the United States with other countries suggests that, even when the strengths of the United States health care system are considered, a significant portion of the nation's health expenditures does not contribute to better care.

Trends in growth in United States health care spending

Since the end of World War II, health care spending has exceeded per capita growth in the nation's economy by more than 2 percentage points (2000 Technical Review Panel on the Medicare Trustees Report 2000). As for Medicare in particular, the Congressional Budget Office (CBO) found that, between 1975 and 2007, program expenditures per capita had exceeded gross domestic product (GDP) growth by 2.3 percent per year (Congressional Budget Office 2009). The consequence of this excess growth is that health care spending has consumed a growing share of the nation's income, and the CMS projects that, from 2007 to 2018, health care spending will increase from 16 percent to 20.3 percent of GDP (Centers for Medicare & Medicaid Services 2009).

**FIGURE
1-2****Health care spending has grown more rapidly than GDP**

Note: GDP (gross domestic product). Total health spending is the sum of all private and public spending. Medicare spending is one component of all public spending.

Source: CMS, Office of the Actuary, National Health Expenditure Accounts, 2009.

Rapid growth in health care spending among all payers

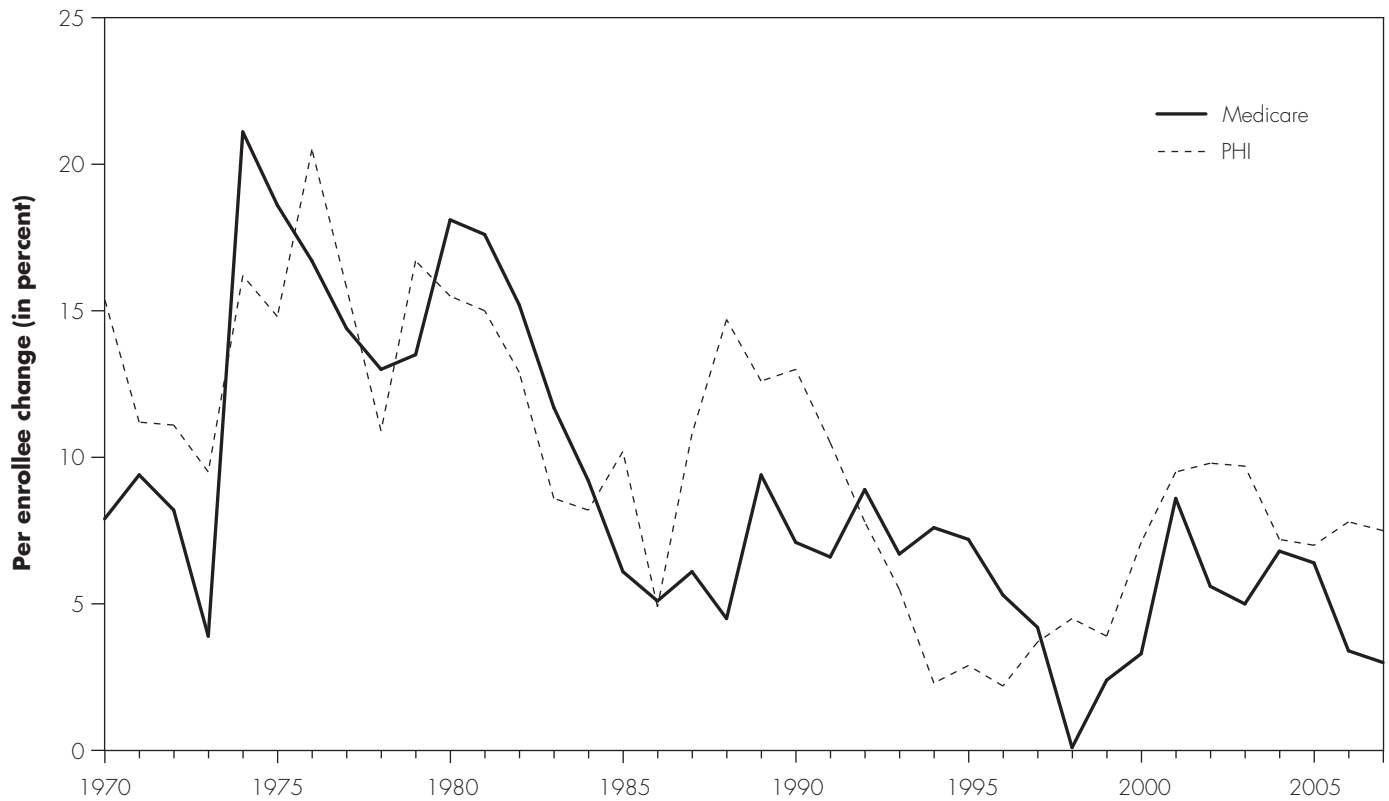
While private and public programs differ in their coverage and financing, over the long term their rates of per capita growth have been similar (Pauly 2003) (Figure 1-3). Some analysts believe that, since the mid-1980s, Medicare, with its larger purchasing power, has had greater success than private payers at containing cost growth (Boccuti and Moon 2003). Others maintain that benefits offered by private insurers have expanded as cost-sharing requirements declined over the entire period and enrollment in managed care plans grew during the 1990s. The comparison is problematic, because Medicare's benefits changed little over the same period (Antos and King 2003). However, as Figure 1-3 indicates, both sectors have experienced substantial rates of growth per enrollee.

Multiple factors account for growth in health care spending

Many factors account for the rise in health care spending, including the rapid development and diffusion of new technology, changing demographics, the nation's income, the impact of health insurance, and rising prices. The nation's health status and health industry consolidation are additional, though smaller, factors that also contribute to increased spending. The ranges of estimates presented in this section reflect the variations in scope, method, and objective of different studies; they should be considered approximations and not precise estimates.

Technology

Most analysts attribute the majority of long-term growth in per capita spending to technology, and its use grows unabated for several reasons (2000 Technical Review

**FIGURE
1-3****Changes in spending per enrollee for Medicare and private health insurance**

Note: PHI (private health insurance). Chart compares services covered by Medicare and PHI, including hospital services, physician and clinical services, and durable medical products.

Source: CMS, Office of the Actuary, National Health Statistics Group, 2009.

Panel on the Medicare Trustees Report 2000, Chernew et al. 1998, Congressional Budget Office 2008b, Fuchs 2005, Newhouse 1992). First, many technologies—procedures, drugs, and devices—reduce the invasiveness, serious side effects, discomfort, or recovery time associated with the therapies they replace, making technology-based treatments highly attractive to patients. Second, although evidence may not exist to help providers decide how newer therapies compare with older or less expensive ones, many providers do not wait for evidence to become available before utilizing a new technology (Redburn and Walsh 2008). Third, when providers recommend newer therapies that are covered by Medicare or other insurance, patients do not face the full cost of their care and may not be concerned about the comparative value of those therapies. Even as some medical technologies lead to savings by shortening hospital stays or avoiding hospitalizations,

most technologies tend to expand the demand for health care and increase spending. In some cases, providers use new technologies inappropriately or more broadly than intended.

More recent analysis has reexamined the role of technology and considered how other factors, such as insurance coverage and income, have changed over time (Smith et al. 2009). Factoring in the historic trends for income and insurance, Smith and colleagues conclude that technology remained significant, accounting for 27 percent to 48 percent of the change in spending since 1960. Although the lower bound of this estimate implies a smaller role for technology, even at 27 percent it remains a significant contributor.

The impact of new technology on spending is compounded under FFS payment systems. Because these

systems tie reimbursement to the volume of services provided, widespread use of new technologies can create opportunities for providers to increase their volume and revenues. Many of the additional services may be beneficial, but FFS payment encourages providers to use the technologies that result in higher volume and payment regardless of value. This practice can bolster an “arms race” mentality in which providers feel compelled to pursue the latest technologies to remain financially successful relative to their peers (Berenson et al. 2006). Under alternative systems, such as capitation and value-based approaches that tie payments to a measure of a procedure’s clinical efficacy, the rewards for additional volume are diminished. Providers would have less financial incentive to pursue the volume opportunities associated with new technology.

National wealth

Growth in a nation’s standard of living is associated with growth in health care spending (Hall and Jones 2007). As individuals become better off and their consumption increases, the incremental value of buying more commodities (e.g., another television or more clothing) falls. By contrast, the marginal value to them of an extended life span does not diminish as quickly. Similarly, the marginal value of procedures that are not life saving but that may improve the quality of life (e.g., joint replacements or cosmetic surgery) may increase relative to that of other goods. Estimates of the impact of rising incomes on health care vary, with one synthesis suggesting that growth in income accounts for 5 percent to 20 percent of the long-term rise in health care costs (Congressional Budget Office 2008b).

Similar to the link between income growth and spending growth, some studies associate differences in income levels with differences in spending levels. As noted earlier, the United States outspends other nations on a per capita basis, and some attribute a portion of this difference to the nation’s higher personal income.

Use of insurance

Research highlights the important role of health insurance in fueling growth in spending. Health insurance can drive up spending because it insulates beneficiaries from the full cost of their care. From 1960 to 2005, the share of health care costs paid out of pocket fell from about 47 percent to 12 percent (Centers for Medicare & Medicaid Services 2009). Lower out-of-pocket costs can contribute to the demand for health services and encourage the development

of new technologies and additional treatments. CBO found that 5 percent to 20 percent of long-term growth in spending is due to the effect of insurance (Congressional Budget Office 2008b). One analysis found that Medicare had an even more pronounced effect on hospital spending (Finkelstein 2007). Finkelstein asserted that the broad increase in demand for hospital services that occurred after the start of Medicare led to greater incentives for hospitals to enter markets, purchase new equipment and facilities, and adopt new practice styles. Extrapolating from her Medicare findings, she suggested that about half of the increase in per capita health spending between 1950 and 1990 could be attributable to the spread of health insurance. Other analysts have noted that small changes in assumptions behind Finkelstein’s extrapolation to all health care spending would lead to much smaller effects (Ellis 2006).

Some protection against high out-of-pocket spending is desirable but may reduce beneficiaries’ sensitivity to costs. Individuals with first dollar coverage—insurance policies with little or no cost sharing before an insurer will pay for services—tend to use more services than those with similar health status and no supplemental coverage. A Commission-sponsored study found that Medicare spending was 17 percent to 33 percent higher for elderly beneficiaries with medigap insurance than for those who had no supplemental insurance (Hogan 2009).

In addition to growth over time, variations in the availability of insurance can also affect spending levels between insured and uninsured individuals. For example, in 2008 individuals insured for the full year are estimated to have received \$4,463 in services on average per person, compared with \$1,686 per person for the uninsured (Congressional Budget Office 2008a). The different levels of expenditure likely reflect differences in their use of and access to service.

Rising health care prices

A review by CBO concluded that between 10 percent and 20 percent of long-term growth in per capita spending was attributable to prices in health care growing faster relative to other prices due to lower productivity in the health sector (Congressional Budget Office 2008b). Measuring price change in health care is challenging because typical measures of health care prices can be misleading. For example, the price of some services, such as a day of inpatient hospital care, has risen from year to year. However, this increase includes changes that may also increase the value of the service to patients—for example

through improvements in the facilities or treatments the hospital provides. Changes in these prices do not provide an accurate indication of the change in prices because they do not account for improvements in outcomes or quality. For example, new technology may increase the costs of a laboratory test, but the new test may offer superior diagnostic information that leads to a better outcome. Simply tracking the price change without factoring in changes in quality offers an incomplete picture because the output of the test has improved quality.

Accuracy of health care prices

Prices that do not accurately reflect providers' costs can also contribute to higher total spending on health care. For example, in the case of imaging services the Commission concluded that a mispricing of these services had encouraged more providers to offer them, driving up the volume of services and total Medicare spending (Medicare Payment Advisory Commission 2009c). In another instance, the Commission examined home health services and found that the rates Medicare has set do not reflect the services provided (Medicare Payment Advisory Commission 2009c). In these instances, improving payment accuracy would result in lower spending and reduce the influence of profitability on the volume of services provided.

Aging and demographics

Changes in demographics also affect Medicare spending, but the magnitude of the impact is sensitive to the period examined. Analysts attribute about 2 percent of the increase in health care spending between 1940 and 1990 to aging of the population (Congressional Budget Office 2008b). However, aging is expected to be a significant factor in the future, although its prominence will fade once the baby boom population has retired (the first wave of which will become eligible for Medicare in 2010). CBO estimated that from 2009 to 2035, 64 percent of the growth in Medicare, Medicaid and Social Security costs would be attributable to aging, but that its role in cost growth would diminish to about 44 percent in 2080 (Congressional Budget Office 2009).

Health status

The nation's underlying health status and changes in clinical treatment thresholds also affect spending. In the Medicare population, chronic conditions are very common. The prevalence of the top four chronic conditions—ischemic heart disease, diabetes, cataracts,

and arthritis—range from 20 percent to 32 percent, and it is typical for a beneficiary to have multiple conditions. In 2003, 94 percent of beneficiaries reported having at least one chronic condition and 57 percent reported having three or more (Centers for Medicare & Medicaid Services 2005b). Analysis by Thorpe and Howard suggests that, between 1987 and 2002, nearly all the growth in health care spending for Medicare beneficiaries could be attributed to spending for patients being treated for five or more conditions (Thorpe and Howard 2006). In 2002, about 50 percent of all Medicare beneficiaries were being treated for five or more conditions, compared with about 31 percent of beneficiaries in 1987. At the same time, a larger proportion of patients being treated for five or more conditions reported that they were in excellent or good health—60 percent in 2002 compared with 33 percent in 1987. The authors concluded that medical professionals are treating healthier patients, treatments are improving health outcomes, or both are occurring.

An analysis of osteoporosis provides another example of how changing clinical treatment thresholds—bounds within which treatment should be given and outside of which it should be withheld—have the potential to significantly increase costs with uncertain benefits (Herndon et al. 2007). The analysis reviewed a change to clinical guidelines that expanded certain osteoporosis treatments to individuals with denser bones. The review found that the new criteria expanded treatment to an additional 7 to 14 million women but suggested that this population would not substantially benefit because of their low-risk for hip fracture. This analysis indicates how new disease thresholds may result in higher rates of diagnosis and treatment but that questionable improvements in care may not warrant the additional expenditures.

Industry consolidation

The consolidation of health care providers and health plans may result in new efficiencies that lower costs, but it can also lead to lower quality and higher prices (Vogt and Town 2006). The concern is that the primary motivation for much of this consolidation is for providers and insurers to capture more market share to achieve favorable payment rates. Such consolidation has resulted in some markets being served by a few dominant plans and providers; depending on the characteristics of the local market, it can result in cooperation to achieve system improvements or an accommodating détente (Ginsburg and Lesser 2006). On the one hand, consolidation may unify local delivery systems around common goals such as improving

Spotlight issue: Regional variation in Medicare service use

The significant differences in spending among regions of the United States raise questions about the efficiency of the United States health care system. Regional variation in Medicare spending per beneficiary reflects many factors, including differences in beneficiaries' health status, Medicare payment rates, service volume (number of services), and service intensity (e.g., MRI versus simple X-ray). However, unadjusted spending is an insufficient measure of the differences among regions because it includes other factors, such as regional differences in Medicare prices and special Medicare payments, beyond just the mix and amount of services provided. To better understand regional variation, the Commission created a measure of the regional variation in Medicare service use that focuses on differences in volume and service mix and controls for differences in Medicare prices, special payments, and other factors that could distort the comparison among regions. Even

with these adjustments, there was substantial variation between the highest and lowest service use areas (Medicare Payment Advisory Commission 2009b).

The Commission implemented two adjustments to convert raw (unadjusted) Medicare spending to an index of service use. First, the Commission adjusted program spending for differences in Medicare payment rates. Removing these differences in payment rates is a necessary step to isolate differences in service use. It does not mean we accept payment rates as appropriate; in past reports, for example, we have recommended changing the way Medicare computes the hospital wage index and special payments to teaching hospitals (Medicare Payment Advisory Commission 2007, Medicare Payment Advisory Commission 2009c). Second, the Commission also adjusted for differences in beneficiaries' health status and several other nonpayment factors. This adjustment ensures that the

(continued next page)

quality. On the other hand, markets with few plans and providers may lack sufficient competition to spur needed improvements in efficiency and innovation. Some analysts have found that providers do not compete on price and efficiency in many markets; instead, they compete to increase market share for their most profitable business lines (Berenson et al. 2006). This situation can lead to an increase in the supply and volume of medical services while failing to address quality or efficiency concerns.

The trends in provider consolidation likely reflect the incentives of fee-for-service medicine, which reward higher volume and lower costs, not necessarily better care. The Commission has recommended exploring forms of organization that encourage collaboration between physicians and hospitals for care coordination and that strengthen the role of primary care (Medicare Payment Advisory Commission 2008b). For example, we recommended that Medicare experiment with bundling payments for all the physician, inpatient, and post-acute care associated with a hospitalization. We also

recommended that Medicare experiment with medical homes to strengthen primary care. These organizational changes should be carefully designed to improve care and restrain costs and not provide inappropriate market advantage.

Quality and efficiency concerns remain despite high level of spending and rapid spending growth

Despite higher growth in spending, the health care system has not produced commensurate increases in quality or outcomes. The health services literature suggests that a substantial share of the health care delivered has little benefit for patients (Fuchs 2004, New England Healthcare Institute 2008). In Medicare specifically, spending per beneficiary varies significantly among regions, and not all of this variation can be explained by differences in prices and health status (see text box). In fact, studies of variation in Medicare spending have found that areas of the country where more care is provided do

Spotlight issue: Regional variation in Medicare service use (cont.)

service use measure is adjusted for differences among regions in the health status of beneficiaries. For this analysis, the Commission grouped beneficiaries by their residence or metropolitan statistical area (MSA) for urban residents. Beneficiaries in rural areas were grouped into a single rest-of-state nonmetropolitan area, one for each state. There is nearly a twofold difference between the area with the greatest service use (Miami–Dade County, Florida) and the area with the least service use (nonmetropolitan Hawaii). There was a 30 percent difference between the areas at the 10th and 90th percentiles of the distribution. This variation suggests that significant savings could be achieved if the patterns of care in higher service use areas could be altered to be similar to those in lower service use areas.

Differences in the incidence of Medicare beneficiaries with supplemental insurance among regions could be one factor that could account for some of the remaining variation. Supplemental insurance may contribute

to regional variation because beneficiaries with this coverage have been found to consume more Medicare services than those who do not have supplemental coverage (Medicare Payment Advisory Commission 2009a). The types of services beneficiaries with supplemental insurance consume more of tend to be discretionary services. For example, average spending per beneficiary was 90 percent higher for elective hospital procedures for beneficiaries who had supplemental coverage. Spending per beneficiary for certain medical specialists was 89 percent higher for those with supplemental coverage. To the extent that supplemental coverage contributes to regional variation, changes in policy that reduce the higher spending by beneficiaries with this insurance would also address regional variation. However, the Commission did not assess the role of supplemental coverage in its analysis of regional variation and more research is needed to know how much it contributes to the regional differences identified. ■

not always have clinical outcomes that are better than lower spending areas and may even have poorer results (Baicker and Chandra 2004). These studies conclude that the volume of Medicare services provided in high-cost areas could be reduced without compromising care quality or beneficiaries' health status (Fisher et al. 2003a, Fisher et al. 2003b). However, because of the multiple factors driving variation, it is challenging to translate these studies' results into policy prescriptions (Potetz and Cubanski 2009).

It should not be surprising that quality problems remain in Medicare despite higher spending, as Medicare's payment systems do not hold providers accountable for the quality of care they deliver. Moreover, providers are not accountable for the full spectrum of care a beneficiary may use, even when they make the referrals that dictate resource use. This lack of accountability of care puts quality of care and efficiency at risk. The Commission has recommended that Medicare pursue pay for performance

to improve quality and has also recommended that Medicare provide physicians with information about their resource use (Medicare Payment Advisory Commission 2005a, Medicare Payment Advisory Commission 2005b, Medicare Payment Advisory Commission 2008b).

Some studies show that quality care is not consistently delivered despite the United States' higher spending. For example, a study by RAND found that a national sample of patients with certain conditions received care consistent with recommended practices only about half the time (McGlynn et al. 2003).

A lack of information for providers and beneficiaries may cause some of the inefficiency and inadequate quality in Medicare. For example, Medicare lacks quality data from many settings of care, does not have timely cost or market data to set accurate prices, and does not generally provide feedback on resource use or quality scores to providers. Individually, providers may have clinical data, but they may not have those data in electronic form,

leaving them without an efficient means to process the information or an ability to act on it. Crucial information on clinical effectiveness and standards of care either may not exist or may not have wide acceptance. In this environment, it is difficult to determine what health care treatments and procedures are needed—and thus what resource use is appropriate, particularly for Medicare patients—many of whom have multiple comorbidities. In addition, beneficiaries are now being called on to make complex choices among delivery systems, drug plans, and providers. But information for beneficiaries that could help them choose higher quality providers and improve their satisfaction is not always available.

Value of gains to health from new technology has diminished over time

Advances in medical technology have led, on average, to improvements in our health and gains in life expectancy. Recently, Cutler and colleagues concluded that, on average across all ages, increases in medical spending between 1960 and 2000 (attributed largely to advances in medical care) provided reasonably good value, with an average cost per life-year gained of \$19,900 (Cutler et al. 2006).

However, when focused on real spending adjusted for inflation and life expectancy for individuals age 65 or older, the same research found that the incremental cost of an additional year of life rose from \$46,800 in the 1970s to \$145,000 in the 1990s. These estimates suggest that the value of health care spending for the elderly has been decreasing, and the authors suggested that their estimates for the 1990s would fail many cost–benefit criteria (Cutler et al. 2006).

Other recent research suggests that survival gains have stagnated since 1996 for patients with acute myocardial infarction (AMI) (Skinner et al. 2006). Skinner and colleagues found that the survival rate for AMI has not improved since 1996, even though spending for patients with this condition has increased. These trends suggest that higher spending is not yielding better outcomes. These authors also compared regional differences in spending for AMI and found that areas with higher spending did not have better health outcomes.

Quality and access are worse for some populations

Numerous measures indicate that low-income individuals and some minority groups have greater difficulty in obtaining appropriate care (Agency for Healthcare Research and Quality 2009). For example, black and

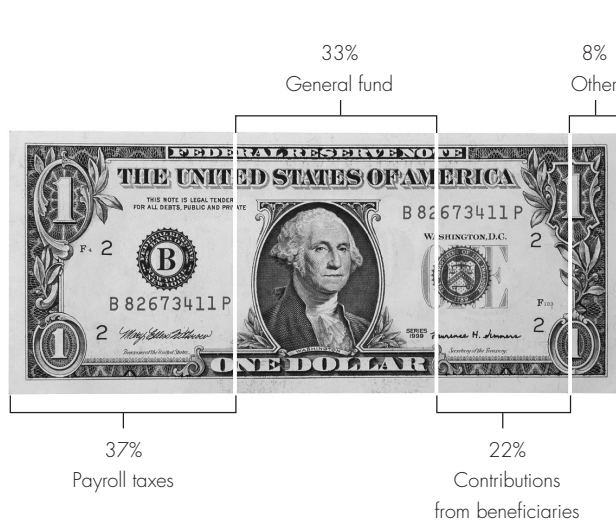
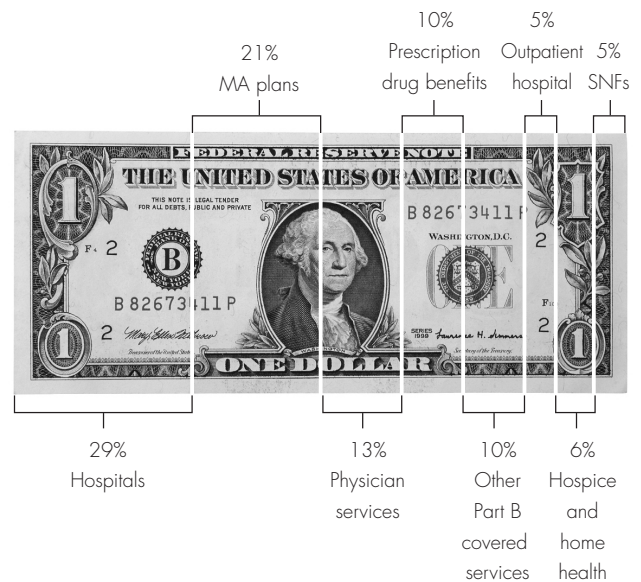
Hispanic seniors were less likely to receive influenza vaccine in 2007. Linguistic barriers and lack of insurance were associated with additional difficulty in achieving access to care. These barriers can result in disadvantaged groups lacking access to health care services. Insurance plays a role in some of these trends, but having coverage does not eliminate disparities. Black and Hispanic adults are less likely to have a usual source of care, even when controlling for differences in the incidence of insurance and other individual characteristics (Escarce and Goodell 2007).

In many instances quality may be lower for minorities and low-income groups even when they receive care. In an analysis of six common, high-risk surgical procedures among Medicare beneficiaries, researchers found that patients of lower socioeconomic status experienced significantly higher rates of adjusted mortality than patients of higher socioeconomic status (Birkmeyer et al. 2008). Like racial and ethnic disparities in hospital and surgical care, the socioeconomic outcome disparities seem to be driven by differences in the hospitals where patients of different socioeconomic status tend to receive treatment. At hospitals with the lowest average socioeconomic status, all patients (both lower and higher socioeconomic status) are more likely to die. Conversely, at hospitals with the highest average socioeconomic status, all patients (both lower and higher socioeconomic status) are less likely to die.

Researchers have found that when they control for socioeconomic status health disparities are reduced but not eliminated (Barr 2008, Cohen et al. 2003). This finding suggests that remaining factors, such as ethnicity and race, may be associated with trouble accessing health care even for members of these groups who are not economically disadvantaged.

Consequences of rapid growth in spending for Medicare and health care system

The status of the Medicare trust funds shows the imminent adverse consequences of rapid growth in health care spending. In their most recent report, the Medicare Trustees project that, under intermediate assumptions, the assets of the Hospital Insurance (HI) trust fund—which covers Part A benefits—will be exhausted in 2017. Income from payroll taxes collected in that year would

**FIGURE
1-4****Comparing the sources and uses of funds for Medicare expenditures****Sources of funds for Medicare expenditures****Uses of funds for Medicare expenditures**

Note: MA (Medicare Advantage), SNF (skilled nursing facility). Sources of funds graphic includes beneficiary premiums and cost sharing. Uses of funds graphic does not include expenditures funded by beneficiary cost sharing. Totals may not sum to 100 percent due to rounding.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

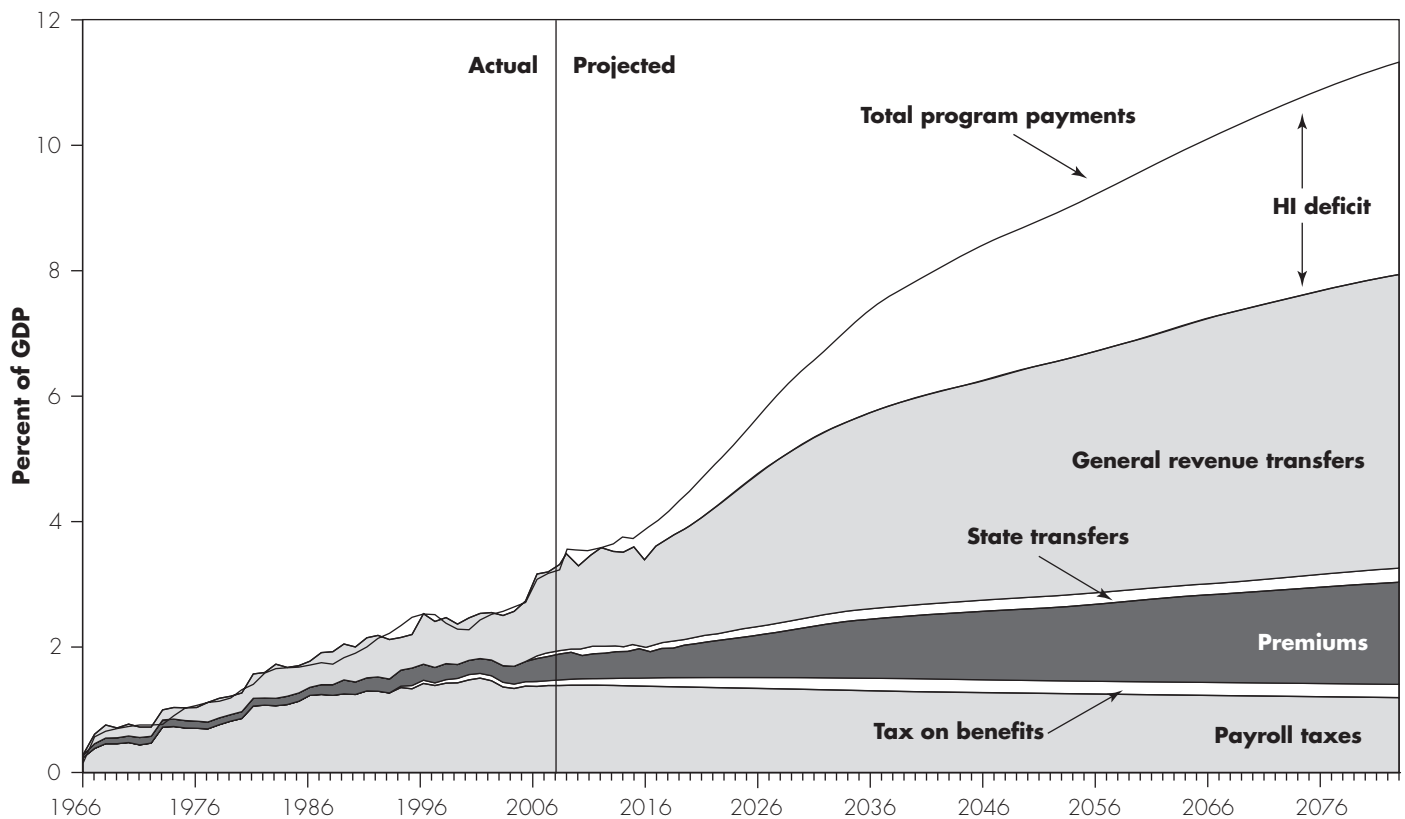
fail to cover 19 percent of projected benefit expenditures. In the future, the share of benefit expenditures covered by payroll tax collections would fall as health care cost inflation exceeded growth in payroll; by 2050, payroll tax collections would cover only 39 percent of projected Part A expenditures. Once exhausted, the trust fund will have no authority to pay for benefits in excess of its revenues.

The Supplementary Medical Insurance (SMI) trust fund—which covers Part B and Part D benefits—is financed automatically with general revenues and beneficiary premiums, but the Trustees point out that financing from the federal government’s general fund, which is funded primarily through income taxes, would have to increase sharply to match the expected growth in spending. Further, the projections for growth in SMI spending are artificially low because they assume that the reductions in physician spending required under the sustainable growth rate (SGR) formula occur—even though these reductions have been consistently overridden in recent years. Even with the unlikely assumption that the SGR reductions are not overridden, the share of federal taxes and spending would grow significantly. Figure 1-4 (left) illustrates

the sources of funding for Medicare expenditures and how program expenditures are distributed among major categories of benefits. The largest source of funds for expenditures is the Part A payroll tax, followed by the transfer from the Treasury general fund for Part B and Part D. Contributions from beneficiaries make up the next largest groups, and include beneficiary premiums, copays and deductibles for Part A and Part B, and prescription drug cost sharing. Figure 1-4 (right) illustrates the major categories of expenditures for Medicare. The largest component of the federal share of expenditures is for hospital services, consisting of 29 percent of total expenditures. The next largest expenditures are for payments to Medicare Advantage plans and payments under the physician fee schedule.

Growing federal fiscal burden

The projected rapid growth in Medicare spending will have repercussions for beneficiaries and taxpayers as well as for the availability of funds for other federal priorities. Specifically, if Medicare benefits and payment systems remain as they are today, the Trustees note that over time the program will require major new sources of financing

**FIGURE
1-5****Medicare faces serious challenges with long-term financing**

Note: GDP (gross domestic product), HI (Hospital Insurance). These projections are based on the trustees' intermediate set of assumptions. Tax on benefits refers to a portion of income taxes that higher income individuals pay on Social Security benefits that is designated for Medicare. State transfers (often called the Part D "clawback") refer to payments called for within the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 from the states to Medicare for assuming primary responsibility for prescription drug spending.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

for Part A and will automatically require increasing shares of general tax revenues for Part B and Part D. The Trustees project that dedicated payroll taxes will make up a smaller share of Medicare's total revenue and that a large deficit will develop between spending for Part A and revenue from dedicated payroll taxes (Figure 1-5). The share of the nation's GDP committed to Medicare will grow to unprecedented levels, squeezing other priorities in the federal budget. Delays in addressing the HI deficit will provide less time to phase in changes, giving providers and beneficiaries less time to adjust. In addition, the premiums and general revenues required to finance projected spending for SMI services could impose a significant financial liability on Medicare beneficiaries and on resources for other priorities. If income taxes remain at

the historic average share of the economy, the Medicare Trustees estimate that the SMI program's share of personal and corporate income tax revenue would rise from about 11 percent today to 24 percent by 2030. If the projections for SMI were adjusted to remove the payment reductions required by the SGR, the share of personal and corporate income taxes required would be even higher. For example, if the Medicare Expenditures Index update was provided instead of the current reduction, Part B spending would be about 2.9 percent of GDP in 2030 instead of 2.6 percent, which would increase Medicare's revenue needs by \$100 billion in just that year (Clemens et al. 2009).

Increases in Medicare's cost could have profound effects for the federal budget and the economy. Higher spending for Medicare would mean fewer resources for the federal

government to commit to other federal priorities, assuming federal revenues remained unchanged. If a significant share of increased federal spending for Medicare and other health care programs is funded with borrowing, as it has been in the past, the federal government would experience growing deficits.

Increasing out-of-pocket liabilities for beneficiaries

Rapid growth in Medicare spending has implications for beneficiaries because they also finance the program. Cost sharing in Medicare is indexed to increase with expenditures through a variety of mechanisms. For example, from 2004 to 2008, the deductible for Part A rose 17 percent and the Part B deductible rose 35 percent. In addition, as Medicare raises providers' payment rates for services, beneficiary liabilities for copayments and premiums in Part B also increase; spending for Part B copayments has roughly doubled since 1990.

Part B monthly premiums for 2010 are estimated to be \$104.20 (about \$1,250 for the year), an 8.1 percent increase over 2009 (Boards of Trustees 2009). However, most beneficiaries will not pay this amount because of a provision in law that limits the amount that can be deducted from Social Security benefits to pay Medicare premiums. Medicare law has a "hold-harmless" provision that prevents a beneficiary's Social Security benefit from decreasing when the Part B premium increase is greater than the annual cost-of-living adjustment for Social Security; the intent of this provision is to prevent a beneficiary's income from falling due to a rise in the Part B premium. In 2010, no cost-of-living adjustment is projected for Social Security; consequently, 75 percent of beneficiaries will not be subject to the increase in the premium due to the hold-harmless provision.

The 25 percent of beneficiaries subject to the full premium consist of higher income beneficiaries subject to the income-related premium, new enrollees, and dual eligibles—beneficiaries eligible for both Medicare and Medicaid—who have their premiums paid by Medicaid (Kaiser Family Foundation 2009). These beneficiaries will pay a higher premium to compensate for the revenue lost from the hold-harmless provision. This scenario is likely to recur in 2011 because the current Social Security Trustees' forecast projects another year in which there will be no cost-of-living adjustment. The lack of growth in Social Security benefits will shift Part B's increasing costs to a minority of beneficiaries for a few years, but this shift

should dissipate when the annual cost-of-living increase for Social Security resumes.

The share of Social Security benefit devoted to annual Medicare cost sharing is one metric for assessing the burden of cost sharing on beneficiaries. Social Security accounts for three-quarters of the income for 60 percent of the elderly population in 2006 (Federal Interagency Forum on Aging Related Statistics 2008). If we include the out-of-pocket costs of both Part B and Part D, the average cost of SMI premiums and cost sharing (including copayments and deductibles) for Part B and Part D are estimated to absorb about 26 percent of Social Security benefits in 2010 (about 16 percent will be for Part B and about 10 percent will be for Part D) (Figure 1-6, p. 20).

The amount of cost sharing among beneficiaries varies significantly, with beneficiaries incurring the highest Medicare costs bearing a disproportionate share of the total cost-sharing burden. For example, in 2007, the top 6 percent of beneficiaries with the greatest cost-sharing liability, those with \$5,000 or more in liabilities, accounted for 38 percent, or \$19 billion, of all cost sharing paid (Medicare Payment Advisory Commission 2009a). There is no catastrophic protection in Part A or Part B. The growth rate for cost sharing also varies among Medicare beneficiaries. One analysis found that, controlling for inflation and health conditions, average cost sharing for beneficiaries without supplemental insurance from 1996 to 2005 grew by 31 percent, compared with 17 percent for those with some form of private supplemental insurance (Paez et al. 2009).

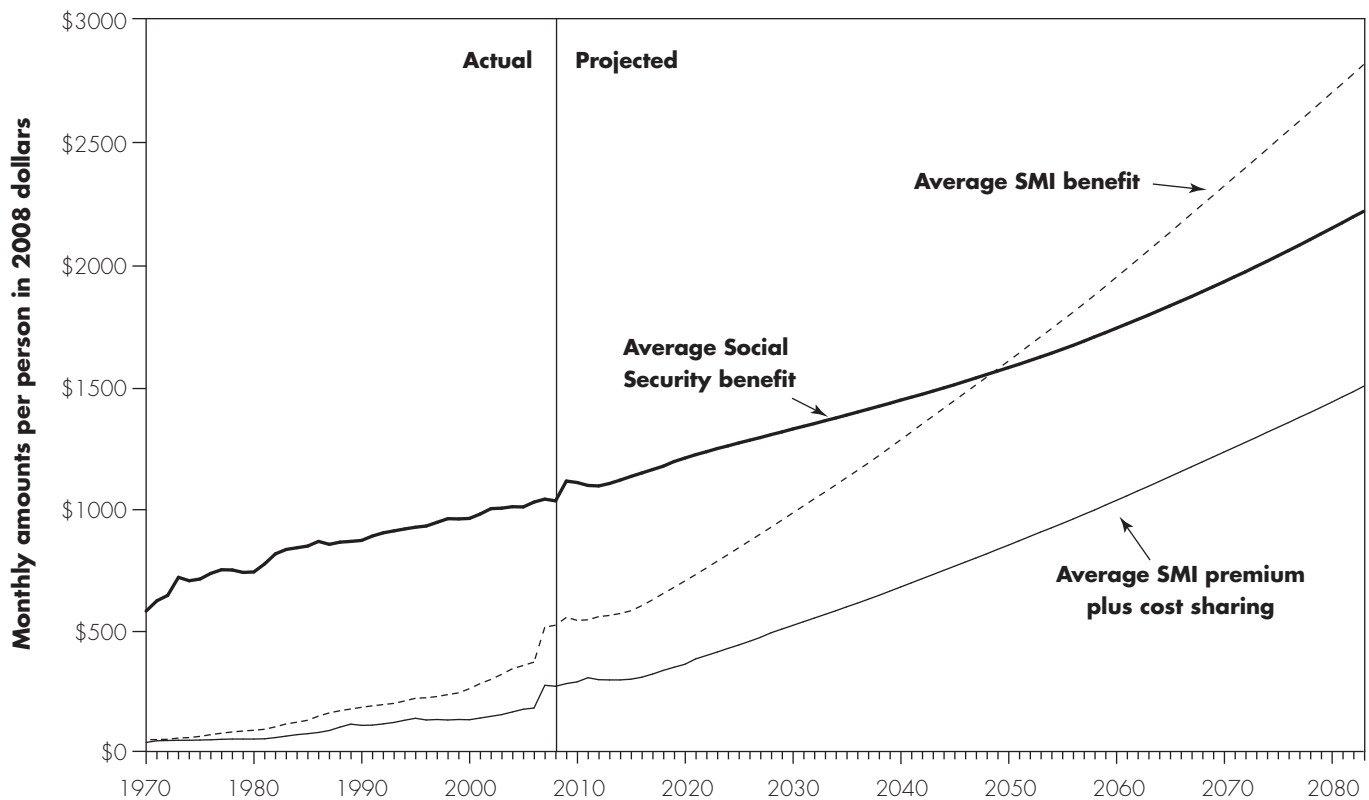
These projections highlight the importance of finding ways to slow growth in Medicare spending (Figure 1-7, p. 21). Beneficiaries who are most exposed to higher out-of-pocket spending—those without supplemental insurance—tend to be more likely to report forgoing care due to cost (Centers for Medicare & Medicaid Services 2005a). If policymakers do not act to curb rising costs, Medicare's need for financing will place an increasing liability on beneficiaries through their premiums and cost sharing, which may compel more of them to forgo medical services.

Consequences of rapid health care spending growth system wide

Some employers argue that the rising cost of health care premiums affects their ability to compete in the world marketplace, but most economists contend that growth in the health premiums employers pay has no long-term

**FIGURE
1-6**

Average monthly SMI benefits, premiums, and cost sharing are projected to grow faster than the average monthly Social Security benefit



Note: SMI (Supplementary Medical Insurance). Average SMI benefit and average SMI premium plus cost-sharing values are for a beneficiary enrolled in Part B and (after 2006) Part D. Beneficiary spending on outpatient prescription drugs prior to 2006 is not shown.

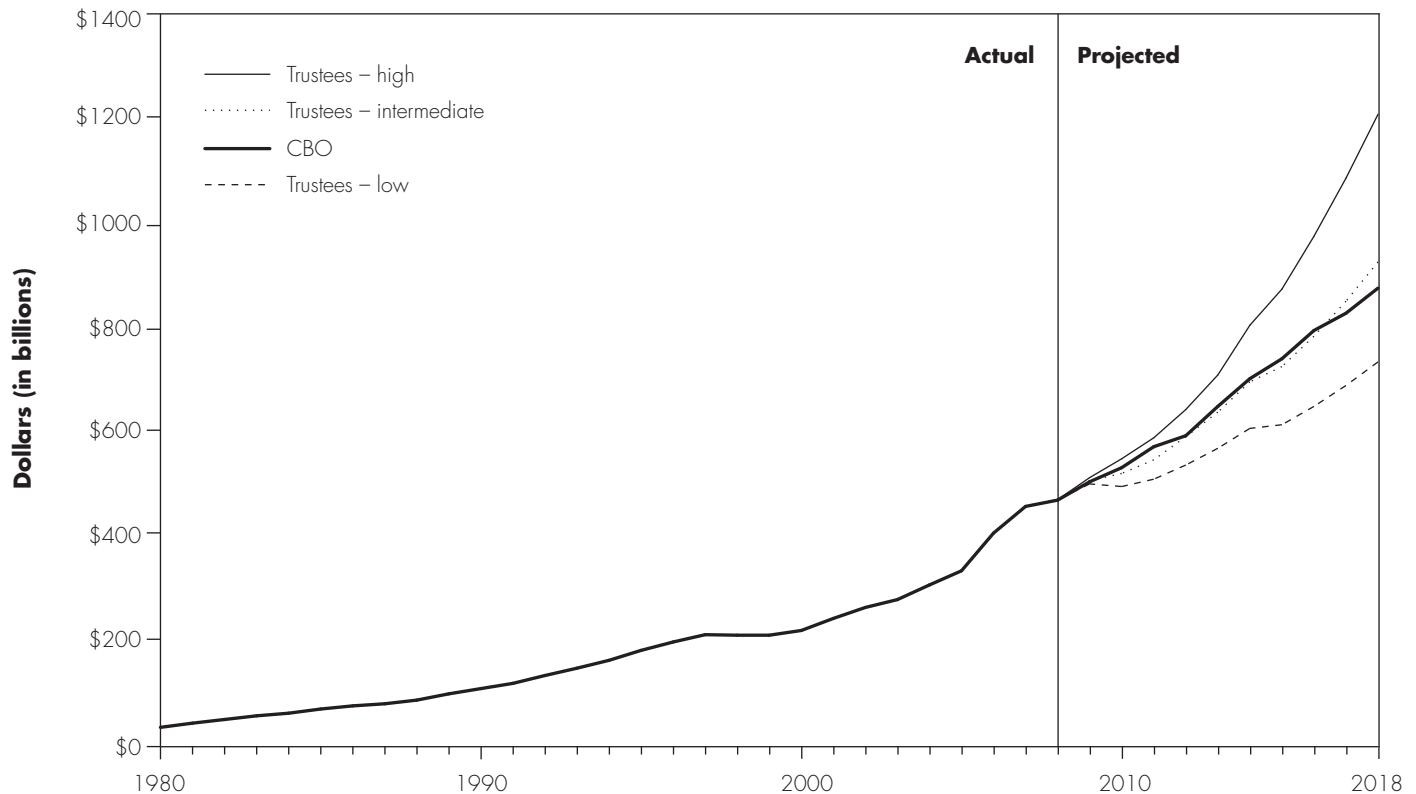
Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds.

effect on the competitive position of firms (Congressional Budget Office 2008a, Fuchs 2005, Pauly 1997). However, some economists argue that, at least in the short run, there are some circumstances in which employers cannot shift costs to employees (Nichols and Axen 2009). One analysis suggests that, in certain industries, employers have not been able to fully offset higher health costs with lower wages or other controls (Sood et al. 2009). Overall, however, most economists believe that health premiums substitute for cash compensation that companies would otherwise pay to workers, and so the costs of health insurance fall on employees.

The impact of health insurance costs on employee wages illustrates how the inefficiencies of the health care system can affect the broader economy. Employers have a finite budget for compensation, and increases in compensation costs that are committed to health insurance cannot be

used to increase salaries. In recent years, increases in the cost of private health insurance have been two or three times greater than the growth in salaries (Claxton et al. 2007). The cost of health insurance benefits has steadily risen as a share of wages and salaries, reflecting the fact that health care spending has outpaced economic growth. As more employee compensation shifts to health insurance, annual wage increases are reduced or eliminated.

Other distributional issues arise from rapid growth in spending on health care. In response to rapid increases in premiums, many employers have raised cost-sharing requirements for their employees or asked them to pay a larger share of premiums. Some analysts have concluded that benefit reductions by some employers have resulted in health plans that do not adequately protect beneficiaries against high medical costs. An analysis by

**FIGURE
1-7****Trustees and CBO project Medicare spending to grow significantly in future years**

Note: CBO (Congressional Budget Office). All data are nominal, gross program outlays (mandatory plus administrative expenses) by calendar year.

Source: 2009 annual report of the Boards of Trustees of the Medicare trust funds. CBO March 2009 baseline.

the Commonwealth Fund found that between 2003 and 2007, the share of nonelderly underinsured, defined as individuals with insurance who spent more than 5 to 10 percent of their income on cost sharing, increased by 35 percent (Schoen et al. 2008).²

Insurance coverage is also declining and many analysts attribute this trend to rising costs. From 2000 to 2008, the share of the population without insurance increased from 14.0 to 15.4 percent; CBO estimates that this share will reach 19 percent by 2019 (Congressional Budget Office 2008a, DeNavas-Walt et al. 2009, Mills 2001). These trends in declining coverage are reflected in the falling proportion of employers offering insurance. From 2000 to 2007, the percentage of employers offering health insurance fell from 69 percent to 60 percent (Nichols and Axeen 2009). Affordability also affects employee choices when offered health insurance. Because required premium contributions

by enrollees have risen faster than income, some workers choose to forgo coverage (Ginsburg 2004).

Increases in the numbers of people without private health insurance raise demand for public coverage. Those who cannot secure coverage may receive uncompensated care, and providers may seek higher payments for insured patients to cover losses. The costs of caring for the uninsured do not fall equally on all providers, since the uninsured often postpone care until their condition becomes more serious. In turn, providers that bear more of those costs sometimes seek public subsidies or limits on the competition they face. Rising costs put upward pressure on the financing needs of public and private health care programs for the beneficiaries who already have coverage. Some analysts contend that higher health care costs can also lead to greater fragmentation of risk pools in the health care market, as healthier people search for insurance alternatives that are less costly (Glied 2003). ■

Private and public sources of financing for health care

Currently, public financing—federal, state, and local programs—makes up about 46 percent of all United States health care spending, with private sources providing the rest. The public share will rise by a few percentage points to over 51 percent by 2018 (Centers for Medicare & Medicaid Services 2009). Medicare accounted for 19 percent of health care spending in 2009. Medicaid was the next largest public program, accounting for 17 percent, and private health insurance (including employer-sponsored plans) equaled about 35 percent. In 2005, employers—including private sector and government employers—were the largest source of health insurance, covering about 177 million individuals or approximately 60 percent of United States residents (Nichols and Axeen 2009).

Estimates of the share of public spending in the national health accounts do not include tax expenditures—that is, the tax revenues that the federal government forgoes through the tax exclusion for employer-sponsored insurance and other provisions. Because these transfers use the tax code to finance health insurance or health care, they are arguably part of the public commitment to funding health care. If the federal tax expenditures for health care in 2007 had been included in the national health accounts as public expenditures, the share of public expenditures would have risen from 47 percent to 60 percent. (Note that this estimate does not include the tax expenditures from state and local taxes forgone and it does not include the impact of changes in behavior by health care payers that would likely occur in the absence of favorable tax treatment.) ■

Endnotes

- 1 Dollar amounts are adjusted for purchasing power parity—differences in the cost of living across countries—by comparing prices for a fixed basket of goods. OECD’s adjustment is a broad-based basket, not one specific to health costs.
- 2 The thresholds were 10 percent of income for higher income beneficiaries, and 5 percent for low-income beneficiaries.

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C H A P T E R

2

**Assessing payment adequacy
and updating payments in
fee-for-service Medicare**

Assessing payment adequacy and updating payments in fee-for-service Medicare

Chapter summary

The Commission makes payment update recommendations annually for fee-for-service (FFS) Medicare. An update is the amount (usually expressed as a percentage change) by which the base payment for all providers in a prospective payment system is changed. To determine an update, we first assess the adequacy of Medicare payments for efficient providers in the current year (2010). Next, we assess how those providers' costs are likely to change in the year the update will take effect (the policy year—2011). Finally, we make a judgment on what, if any, update is needed. When considering whether payments in the current year are adequate, we account for policy changes (other than the update) that are scheduled to take effect in the policy year under current law. This year, we make update recommendations in 10 FFS sectors: hospital inpatient, hospital outpatient, physician, ambulatory surgical center, outpatient dialysis, hospice, skilled nursing, home health, inpatient rehabilitation, and long-term care hospital. We discuss the analyses of payment adequacy for the first six sectors in this chapter and for the four post-acute care sectors in Chapter 3.

These update recommendations can significantly change the revenues providers receive from Medicare. They also can help create pressure for broader reforms to address the fundamental problem in FFS payment systems—that providers are paid more when they deliver more services

In this chapter

- Hospital inpatient and outpatient services
- Physician services
- Ambulatory surgical centers
- Outpatient dialysis services
- Hospice

without regard to the quality or value of those additional services. Therefore, each year the Commission looks at all the indicators of payment adequacy and reevaluates any prior year assumptions using the most recent data available to make sure its recommendations accurately reflect current conditions. ■

The goal of Medicare payment policy is to get good value for the program's expenditures, which means maintaining beneficiaries' access to high-quality services while encouraging efficient use of resources. Anything less does not serve the interests of the taxpayers and beneficiaries who finance Medicare through their taxes and premiums. Necessary steps toward achieving this goal involve:

- setting the base payment rate (i.e., the payment for services of average complexity) at the right level;
- developing payment adjustments that accurately reflect market, service, and patient cost differences beyond providers' ability to control; and
- considering the need for annual payment updates and other policy changes.

Our general approach to developing payment policy recommendations attempts to do two things: make enough funding available to ensure that payments are adequate to cover the costs of efficient providers, and improve payment accuracy among services and providers. Together, these steps should maintain Medicare beneficiaries' access to high-quality care while creating financial pressure on providers to make better use of taxpayers' and beneficiaries' resources.

To help determine the appropriate level of aggregate funding for a given payment system in 2011, we first consider whether payments are adequate for efficient providers in 2010. To inform the Commission's judgment, we examine information on beneficiaries' access to care, the quality of care, providers' access to capital, and Medicare payments and providers' costs for 2010.

We then consider how efficient providers' costs will change in 2011. Taking these factors into account, we then determine how Medicare payments for the sector in aggregate should change in 2011.

Ideally, we would make our judgments based on the performance of efficient providers in a sector. Efficient providers use fewer inputs to produce quality outputs. Efficiency could be increased by using the same inputs to produce a higher quality output or by using fewer inputs to produce the same quality output. However, for the most part we are limited by the available data and the analytical state-of-the-art to looking at the aggregate performance in a sector over both efficient and inefficient providers. We have, in some sectors, started to explore ways to

approximate the characteristics of efficient providers. For example, last year, we examined the financial performance of hospitals with consistently low risk-adjusted costs per discharge, mortality, and readmissions (Medicare Payment Advisory Commission 2009). This year, we add an analysis of providers' payer mix and the annual level of total fee-for-service (FFS) Medicare service use per capita in the county where the hospital is located.

This year we have also extended our analysis of efficient providers to the skilled nursing facility (SNF) sector. We find that there are some SNFs that have considerably lower costs than other SNFs and substantially better quality results. As our analysis evolves, we plan to continue to refine our identification of efficient providers and extend our efficient provider analysis to other sectors.

Within a given level of funding, we may also consider changes in payment policy that would affect the distribution of payments and improve equity among providers or improve access to care for beneficiaries. We then recommend updates and other policy changes for 2011.

Are Medicare payments adequate in 2010?

The first part of the Commission's approach to developing payment updates is to assess the adequacy of current Medicare payments. For each sector, we make a judgment by examining information on:

- beneficiaries' access to care
 - direct measures of access (if available)
 - the capacity and supply of providers
 - the volume of services
- the quality of care
- providers' access to capital
- Medicare payments and providers' costs for 2010

Some measures focus on beneficiaries (e.g., access to care) and some focus on providers (e.g., the relationship between payments and costs in 2010). We consider multiple measures because the direct relevance, availability, and quality of each type of information vary

among sectors, and no single measure provides all the information needed for the Commission to judge payment adequacy.

Beneficiaries' access to care

Access to care is an important indicator of the willingness of providers to serve Medicare beneficiaries and the adequacy of Medicare payments. (For example, poor access could indicate Medicare payments are too low.) However, other factors unrelated to Medicare's payment policies may also affect access to care. These factors include coverage policy, beneficiaries' preferences, supplemental insurance, and transportation difficulties.

The measures we use to assess beneficiaries' access to care depend on the availability and relevance of information in each sector. For example, we use results from several surveys to assess physicians' willingness to serve beneficiaries and beneficiaries' opinions about their access to physician care. For home health services, we examine data on whether communities are served by providers.

Access: Capacity and supply of providers

Rapid growth in the capacity of providers to furnish care may increase beneficiaries' access and indicate that payments are more than adequate to cover their costs. Changes in technology and practice patterns may also affect providers' capacity. For example, less invasive procedures or lower priced equipment could increase providers' capacity to provide certain services.

Substantial increases in the number of providers may suggest that payments are more than adequate and could raise concerns about the value of the services being furnished. For instance, rapid growth in the number of home health agencies (HHAs) suggests that Medicare's payment rates are at least adequate and potentially more than adequate and, because the growth has been accompanied by increased cases of fraud, raises concerns over the definition of the benefit. If Medicare is not the dominant payer for a given provider type, changes in the number of providers may be influenced more by other payers and their demand for services and thus may be difficult to relate to Medicare payments. When facilities close, we try to distinguish between closures that have serious implications for access to care in a community and those that may have resulted from excess capacity. Another possible indicator of a sector's capacity and overall financial health is employment, which has been

increasing in the health care sector in the past two years even as overall nonfarm employment has decreased. We are exploring the utility of employment as an indicator of capacity and payment adequacy.

Access: Volume of services

The volume of services can be an indirect indicator of beneficiary access to services. An increase in volume shows that beneficiaries are getting more services and thus must at least be able to access those services—although it does not necessarily demonstrate that the services are convenient or appropriate. Volume is also an indicator of payment adequacy; an increase in volume beyond that expected for the increase in the number of beneficiaries could suggest that Medicare's payment rates are too high. Very rapid increases in the volume of a service might even raise questions about program integrity or whether the definition of the benefit is too vague. Reductions in the volume of services, on the other hand, may indicate that revenues are inadequate for providers to continue operating or to provide the same level of services. Finally, rapid changes in volume between services that can be substituted might indicate distortions in payment and raise questions of provider equity.

However, changes in the volume of services are often difficult to interpret because increases and decreases could be explained by other factors, such as population changes, changes in disease prevalence among beneficiaries, technology, practice patterns, and beneficiaries' preferences. For example, the number of Medicare beneficiaries in the traditional FFS program has decreased in some years as more beneficiaries choose plans in the Medicare Advantage program; therefore, we look at the volume of services per FFS beneficiary as well as the total volume of services. Explicit decisions about service coverage can also influence volume. For example, in 2004 CMS redefined conditions it thought appropriate for treatment in inpatient rehabilitation facilities (IRFs) and excluded rehabilitation for most hip and knee replacements, a decision that contributed to a reduction in IRF volume through 2009. However, these cases increased in SNFs and HHAs over the same period, suggesting that beneficiaries' access to care was maintained. Changes in the volume of physician services must be interpreted particularly cautiously, because some evidence suggests that volume may also go up when payment rates go down—the so-called volume offset. Whether this phenomenon exists in any other sector depends on

how discretionary the services are and on the ability of providers to influence beneficiary demand for the services.

Quality of care

The relationship between quality and Medicare payment adequacy is not direct. Some might argue that poor quality is a result of inadequate payments. But increasing payments through an update for all providers in a sector regardless of their individual quality is unlikely to solve quality problems, because there is generally little or no incentive in Medicare payment systems for providers to spend additional resources on improving quality. Medicare's payment systems are not generally based on quality; payment is usually the same regardless of the quality of care. In fact, undesirable outcomes (e.g., unnecessary complications) may result in additional payments, and sectors with more than adequate payments may have little incentive to improve quality.

A fundamental change is needed to change incentives in Medicare FFS payment systems so that better quality is rewarded. The Commission supports linking payment to quality to hold providers accountable for the care they furnish as discussed in our March 2004 and 2005 reports (Medicare Payment Advisory Commission 2004, Medicare Payment Advisory Commission 2005). Specifically, the Commission recommended that pay-for-performance programs be implemented for hospitals, physicians, dialysis facilities and physicians furnishing services to dialysis patients, HHAs, and Medicare Advantage plans (Medicare Payment Advisory Commission 2004, Medicare Payment Advisory Commission 2005). For hospitals and dialysis providers, measures are already available for such a program. For physicians, we described a two-step process that starts with measures of information technology function and moves on to process of care and other measures. In 2008, the Commission recommended that pay for performance be adopted for SNFs (Medicare Payment Advisory Commission 2008). Other sectors may lack quality measures that could be linked to payment and developing such measures should be a priority.

Providers' access to capital

Access to capital is necessary for providers to maintain and modernize their facilities and capabilities for patient care. Widespread inability to access capital throughout a sector might in part reflect on the adequacy of Medicare payments (or, in some cases, even on the expectation of changes in the adequacy of Medicare payments). However,

access to capital may not be a useful indicator of the adequacy of Medicare payments when the sector has little need for large capital investments, when providers derive most of their payments from other payers or other lines of business, or when conditions in the credit markets are extreme.

Last year, because of the extraordinary conditions in the credit market, access to capital was being driven almost entirely by factors other than Medicare payment adequacy. For example, health care municipal bond issuances rose to \$24.7 billion in the second quarter of 2008 (a level not seen since 1990); the market then essentially froze in late September and virtually no health care entities issued municipal bonds (*Modern Healthcare* 2008). The lack of access to capital in late September 2008 through most of October 2008 was not a result of changes in the adequacy of Medicare payments; it was a result of the conditions in the credit markets. In 2009, liquidity has returned: During 2009, the average rate of bond offerings was \$3.4 billion per month, only slightly lower than the record set in early 2008 and on par with 2007 levels. Although markets are returning to a more normal state, any projections about access to capital are still guarded because of the extreme volatility in the credit markets. Conditions will also vary by sector.

A closely allied question is: How will overall economic conditions affect a health care sector's financial performance? For example, the decline in investment portfolios, increasing interest expenses, and possible declines in private payer patient volumes and increases in uninsured patients may lower overall financial performance. But hospitals appear to have controlled their costs in 2009 in reaction to economic conditions. Furthermore, attempting to offset overall economic conditions through increased Medicare payment updates would be a poorly targeted response to economic problems. Base rate increases go to all providers, yet not all providers are equally affected by the economy or equally dependent on Medicare payments. For example, a hospital with few Medicare patients would be hurt more by a decline in employer insurance coverage caused by a declining economy than would a hospital with a high percentage of Medicare patients. Yet an increase in the update would help the second hospital more than the first. Moreover, addressing problems resulting from a poor economy by increasing Medicare payments would either further threaten program sustainability or require increasing taxes.

Medicare payments and providers' costs for 2010

For most payment sectors, we estimate Medicare payments and costs for the year preceding the policy year. In this report, we estimate payments and costs for 2010 to inform our update recommendations for 2011.

For providers that submit cost reports to CMS—acute care hospitals, SNFs, HHAs, outpatient dialysis facilities, IRFs, long-term care hospitals (LTCHs), and hospices—we estimate total Medicare-allowable costs and assess the relationship between Medicare's payments and those costs. We typically express the relationship between payments and costs as a payment margin, which is calculated as aggregate Medicare payments for a sector less costs divided by payments. By this measure, if costs increase faster than payments, margins will decrease.

To estimate payments, we first apply the annual payment updates specified in law for 2009 and 2010 to our 2008 base data. In general, we then model the effects of other policy changes that will affect the level of payments, including those—other than payment updates—that are scheduled to go into effect in 2011. This method allows us to consider whether current payments would be adequate under all applicable provisions of current law. The result is an estimate of what payments in 2010 would be if 2011 payment rules were in effect. (Hospitals and dialysis providers are exceptions this year: Hospitals, because of the uncertainty surrounding 2011 policy concerning documentation and coding improvements and information technology subsidies; and dialysis providers, because of uncertainty about the new bundled payment and provider reaction to it. For these two sectors, we model 2010 margins given 2010 policy.)

To estimate 2010 costs, we consider the rate of input price inflation and historical cost growth. As appropriate, we adjust for changes in the product (i.e., changes within the service provided, such as fewer visits in an episode of home health care) and trends in key indicators, such as historical cost growth, and the distribution of cost growth among providers.

Using margins

In most cases, we assess Medicare margins for the services furnished in a single sector and covered by a specific payment system (e.g., SNF or home health services). However, in the case of hospitals, which often provide services that are paid for by multiple Medicare payment

systems, our measures of payments and costs for an individual sector could become distorted because of the allocation of overhead costs or complementarities of services. (For example, having a hospital-based SNF on average allows a hospital to achieve shorter lengths of stay in its acute care units.) For hospitals, we assess the adequacy of payments for the whole range of Medicare services they furnish—inpatient and outpatient (which together account for more than 90 percent of Medicare payments to hospitals), SNF, home health, psychiatric, and rehabilitation services—and compute an overall Medicare hospital margin encompassing Medicare-allowed costs and payments for all the sectors. The hospital update recommendation in this chapter, however, applies only to hospital inpatient and outpatient payments; the payments for other distinct units of the hospital, such as a SNF, are governed by payment rates for those payment systems.

Total margins—which include payments from all payers as well as revenue from nonpatient sources—do not play a direct role in the Commission's update deliberations. The adequacy of Medicare payments is assessed relative to the costs of treating Medicare beneficiaries, and the Commission's recommendations address a sector's Medicare payments, not total payments.

We calculate a sector's Medicare margin to determine whether total Medicare payments cover average providers' allowable costs and to inform our judgment about payment adequacy. There will always be a distribution of margins about the average and it is not the intent to ensure every provider has a positive margin. To assess whether changes are needed in the distribution of payments, we calculate Medicare margins for certain subgroups of providers with unique roles in the health care system. For example, because location and teaching status enter into the payment formula, we calculate Medicare margins based on where hospitals are located (in urban or rural areas) and their teaching status (major teaching, other teaching, or nonteaching).

Multiple factors can contribute to changes in the Medicare margin, including changes in the efficiency of providers, unbundling of the services included in the payment unit, and other changes in the product (e.g., reduced lengths of stay at inpatient hospitals). Information about the extent to which these factors have contributed to margin changes may help in deciding how much to change payments.

Finally, the Commission makes a judgment when assessing the adequacy of payments relative to costs. No

single standard governs this relationship for all sectors, and margins are not the only indicator for determining payment adequacy.

Appropriateness of current costs

Our assessment of the relationship between Medicare's payments and providers' costs is complicated by providers' efficiency and response to changes in the payment system, product changes, and cost-reporting accuracy. Measuring the appropriateness of costs is particularly difficult in new payment systems because changes in response to the incentives in the new system are to be expected. For example, the number and types of visits in a home health episode changed significantly after the home health prospective payment system (PPS) was introduced, although the payments were based on the older higher level of use and costs. In other systems, coding may change. As an example, the hospital inpatient PPS recently introduced a new patient classification system that eventually will result in more accurate payments. However, in the near term, it has resulted in higher payments because provider coding improved, making patient complexity appear higher—although the underlying patient complexity is unchanged. Any kind of rapid change in policy, technology, or product can make it difficult to measure costs per unit of comparable product.

To assess whether reported costs reflect the costs of efficient providers, we examine recent trends in the average cost per unit of output, variation in standardized costs and cost growth, and evidence of change in the product being furnished. One issue Medicare faces is the extent to which private payers are exerting pressure on providers to constrain costs. If private payers do not exert pressure, providers' costs will increase and, all other things being equal, margins on Medicare patients will decrease. Providers that are under pressure to constrain costs generally have managed to slow their growth in cost more than those facing less pressure (Gaskin and Hadley 1997, Medicare Payment Advisory Commission 2005). Lack of cost pressure would be more common in markets where a few providers dominate and have negotiating leverage over payers.

In contrast, some have suggested that hospital costs, for example, are largely outside the control of hospitals and hospitals shift costs onto private insurers to offset Medicare losses. This belief argues that costs are immutable and are not influenced by whether the hospital is under financial pressure. We find that costs do vary in

response to financial pressure and that low margins on Medicare patients can result from a high cost structure that has developed in reaction to high private-payer rates. (See the hospital chapter in our 2009 report for a more complete discussion of the relation between cost pressure and Medicare margins (Medicare Payment Advisory Commission 2009).)

Variation in cost growth among providers in a sector can give us insight into the range of performance that facilities are capable of achieving. For example, if some providers in a given sector have more rapid growth in cost than others, we might question whether those increases are appropriate.

Changes in product can significantly affect unit costs. Returning to the example of home health, substantial reductions in the number of visits in home health episodes would be expected to reduce the growth in costs per episode. If costs per episode instead increased while the number of visits decreased, one would question the appropriateness of the cost growth.

In sum, Medicare payment policy should not be designed simply to accommodate whatever level of cost growth a sector demonstrates. Cost growth can oscillate from year to year depending on economic conditions, relative market power, and other factors. Policymakers should accommodate cost growth in payment policy only after taking into account a broad set of payment adequacy indicators, including the current level of Medicare payments.

What cost changes are expected in 2011?

The second part of the Commission's approach to developing payment update recommendations is to account for anticipated cost changes in the next payment year. For each sector, we review evidence about the factors that are expected to affect providers' costs. A major factor is change in input prices, as measured by the applicable CMS price index. For facility providers, we use the forecasted increase in an industry-specific index of national input prices, called a market basket index. For physician services, we use a CMS-derived weighted average of price changes for inputs used to provide physician services. Forecasts of these indexes approximate

how much providers' costs would rise in the coming year if the quality and mix of inputs they use to furnish care remained constant. Other factors include the trend in actual cost growth, which may be used to inform our estimate if it differs significantly from the market basket.

How should Medicare payments change in 2011?

The Commission's judgments about payment adequacy and expected cost changes result in an update recommendation for each payment system. Each year we look at all the indicators of payment adequacy and reevaluate any prior year assumptions using the most recent data available. In addition, in some cases the update may incorporate an allowance for productivity. Competitive markets demand continual improvements in productivity from workers and firms. These workers and firms pay the taxes used to finance Medicare. Medicare's payment systems should exert the same pressure on providers of health services. Consequently, the Commission may choose to apply an adjustment to the update to encourage providers to produce a unit of service as efficiently as possible while maintaining quality. The Commission begins its deliberations with the expectation that Medicare should benefit from productivity gains in the economy at large (the 10-year average of productivity gains in the general economy, currently 1.3 percent). But the Commission may alter that expectation depending on the circumstances of a given set of providers in a given year. This factor links Medicare's expectations for efficiency to the gains achieved by the firms and workers who pay the taxes that fund Medicare.

In conjunction with the update recommendations, we may also make recommendations about the distribution of payments among providers. These distributional changes are sometimes, but not always, budget neutral. Our recommendations for pay for performance are one example of distributional changes that will affect providers differentially based on their performance.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires the Commission to consider the budget consequences of our recommendations. We document in this report how spending for each recommendation would compare with expected spending under current law. We develop rough estimates of the impact of recommendations relative to

the current budget baseline, placing each recommendation into one of several cost-impact categories. In addition, we assess the impacts of our recommendations on beneficiaries and providers.

Payment adequacy in context

As discussed in Chapter 1, it is essential to look at payment adequacy not only within the context of individual payment systems but also in terms of Medicare as a whole. The Commission is alarmed by the trend in Medicare spending per beneficiary—a growth rate well above that of the economy overall—without a commensurate increase in value to the program, such as higher quality of care or improved health status. If unchecked, the growth in spending, combined with retirement of the baby boomers, will result in the Medicare program absorbing unprecedented shares of the gross domestic product and of federal spending. Slowing the increase in Medicare outlays is important; indeed, it is urgent. Medicare's rising costs, coupled with the projected growth in the number of beneficiaries, will significantly burden taxpayers.

The financial future of Medicare prompts us to look at payment policy and ask what can be done to develop, implement, and refine payment systems to reward quality and efficient use of resources while improving payment equity.

In many past reports, the Commission has stated that Medicare should institute policies that improve the value of the program to beneficiaries and taxpayers. These policies should help improve the Medicare payment system. Policies such as pay for performance that link payments to the quality of care providers furnish should be implemented. To reduce unwarranted variation in volume and expenditures, Medicare should collect and distribute information about how providers' practice styles and use of resources compare with those of their peers. Ultimately, this information could be used to adjust payments to providers. Increasing the value of the Medicare program to beneficiaries and taxpayers requires knowledge about the costs and health outcomes of services. Until more information on the comparative effectiveness of new and existing health care treatments and technologies is available, patients, providers, and the program will have difficulty determining what constitutes high-quality care and effective use of resources.

As we examine each of the payment systems, we also look for opportunities to develop policies that can create incentives for providing high-quality care efficiently across providers and over time. Some of the current payment systems create strong incentives for increasing volume, and very few of these systems encourage providers to work together toward common goals. Future

Commission work will examine innovative policies for the FFS program. Each year, however, the Commission must closely examine a broad set of indicators, make sure there is consistent pressure on providers to control their costs, and set a demanding standard for determining which providers qualify for a payment update each year. ■

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2A

SECTION

Hospital inpatient and outpatient services

R E C O M M E N D A T I O N S

- 2A-1** The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2011 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

-
- 2A-2** To restore budget neutrality, the Congress should require the Secretary to fully offset increases in inpatient payments due to hospitals' documentation and coding improvements. To accomplish this goal, the Secretary must reduce payment rates in the inpatient prospective payment system by the same percentage (not to exceed 2 percentage points) each year in 2011, 2012, and 2013. The lower rates would remain in place until overpayments are fully recovered.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

2A

SECTION

Hospital inpatient and outpatient services

Section summary

The 3,500 hospitals participating in the inpatient prospective payment system had more than 10 million fee-for-service (FFS) Medicare admissions in 2008. Payments to these hospitals for Medicare inpatient and outpatient FFS services per beneficiary grew by 3.7 percent from 2007 to 2008, resulting in hospitals receiving approximately \$139 billion for inpatient and outpatient services.

Assessment of payment adequacy

Most indicators of payment adequacy are positive, but profit margins on Medicare patients remain negative for most hospitals. Considering all indicators, the Commission recommends that payment rates for the acute inpatient and outpatient prospective payment systems in 2011 be increased by the projected rate of increase in the hospital market basket index, concurrent with implementation of a budget-neutral quality incentive payment program. The resulting increase in payments a hospital receives would be a function of the update and its performance on quality measures. On net, a well-performing hospital would receive more than the update and a poor performer would receive less than the full update.

Beneficiaries' access to care—Access measures include the capacity of providers and changes in the volume of services over time.

- **Capacity and supply of providers**—The supply of hospitals, range of services offered, and the number of hospital employees all continue to grow.

In this section

- Are Medicare payments adequate in 2010?
- How should Medicare payments change in 2011?

- ***Volume of services***—The volume of hospital outpatient services per Medicare beneficiary from 2003 to 2008 grew more than 4 percent per year. While this growth was partly due to a shift of services from the inpatient to the outpatient setting, inpatient services declined by only 0.1 percent annually.

Quality of care—Quality continues to improve on most measures. Hospitals reduced 30-day mortality rates across all 6 conditions monitored, process-of-care measures improved, and patient satisfaction improved. However, readmission rates remained unchanged, and indicators of patient safety showed mixed results.

Providers' access to capital—Access to capital has been volatile over the past year. Credit markets froze in late 2008, but by late 2009 interest rates paid by hospitals had fallen and the monthly volume of bond offerings in 2009 was roughly the same as in 2007.

Medicare payments and providers' costs—In 2008, Medicare payments per discharge rose by 4.5 percent, compared with 5.5 percent growth in costs per discharge. Roughly 3 percentage points of the payment growth was due to updates of Medicare payment rates; the rest was due to more detailed documentation and coding of diagnoses that accompanied payment system refinements. The overall Medicare margin declined from –6 percent to –7.2 percent from 2007 to 2008.

Efficient providers—To assess whether current Medicare payments are adequate to cover the costs of efficient providers, we examined financial outcomes for a set of hospitals that consistently perform relatively well on cost, mortality, and readmission measures. We find that Medicare payments cover the fully allocated costs of the median efficient hospital; however, we also find that most of these hospitals do not generate significant profits from serving Medicare beneficiaries.

Documentation and coding adjustment

To ensure that the aggregate level of hospital payments is correct, the update recommendation is coupled with a recommendation to correct for the effect of improved documentation and coding on Medicare payments. As expected, implementation of Medicare severity–diagnosis related groups (MS–DRGs) in 2008 gave hospitals a financial incentive to improve medical record documentation and diagnosis coding to more fully account for each patient's severity of illness. While documentation and coding improvements appropriately improve measurement of patient severity, they also increase reported case mix under MS–DRGs without a real increase in patient severity or the resources hospitals must use to furnish inpatient care. To ensure that the transition to MS–DRGs is budget neutral, an offsetting adjustment must be applied to the Medicare base payment amounts. We recommend spreading this budget-neutrality adjustment out over several years. ■

**TABLE
2A-1****Growth in Medicare inpatient and outpatient spending**

Type of spending	2003	2006	2007	2008	Annual rate of change 2003-2008
Hospital inpatient services					
Total FFS payments (in billions)	\$95	\$107	\$107	\$109	2.7%
Payments per FFS enrollee	2,740	3,060	3,120	3,210	3.2
Hospital outpatient services					
Total FFS payments (in billions)	21	28	29	30	7.4
Payments per FFS enrollee	650	860	930	990	8.8

Note: FFS (fee-for-service). Reported hospital spending includes all hospitals covered by Medicare's inpatient and outpatient prospective payment systems and critical access hospitals. Maryland hospitals are excluded. Fiscal year 2008 payments include partial imputation to account for hospitals that typically do not submit their cost reports to CMS before CMS makes the most recent year available to the public. Although the number of Medicare beneficiaries grew significantly from 2003 to 2008, the number of FFS beneficiaries declined over that time due to the shift of beneficiaries to the Medicare Advantage program. For the purposes of calculating payments per beneficiary, we identified populations of beneficiaries eligible for inpatient (Part A) and outpatient (Part B) coverage and excluded enrollees in Maryland.

Source: MedPAC analysis of CMS hospital cost reports and Medicare Provider Analysis and Review files.

Background

Hospitals provide Medicare beneficiaries with inpatient care for the diagnosis and treatment of acute conditions and manifestations of chronic conditions. They also provide ambulatory care through outpatient departments and emergency rooms. In addition, many hospitals provide home health, skilled nursing facility, psychiatric, or rehabilitation services. To be eligible for Medicare payment, short-term general and specialty hospitals must meet the program's conditions of participation and agree to accept Medicare rates as payment in full.

Medicare spending on hospitals

In 2008, Medicare spent \$109 billion on fee-for-service (FFS) inpatient care and \$30 billion on FFS outpatient care at general acute care hospitals (Table 2A-1). Acute inpatient and outpatient services represented more than 90 percent of Medicare FFS spending on general acute care hospitals. Aggregate FFS spending growth was slow in recent years due to Medicare beneficiaries shifting from FFS Medicare to Medicare Advantage plans. But on a per capita basis (including spending at critical access hospitals (CAHs)), Medicare inpatient spending per FFS enrollee grew from 2003 to 2008 by 3.2 percent per year. During the same five-year period, outpatient spending per FFS enrollee grew by 8.8 percent per year. The

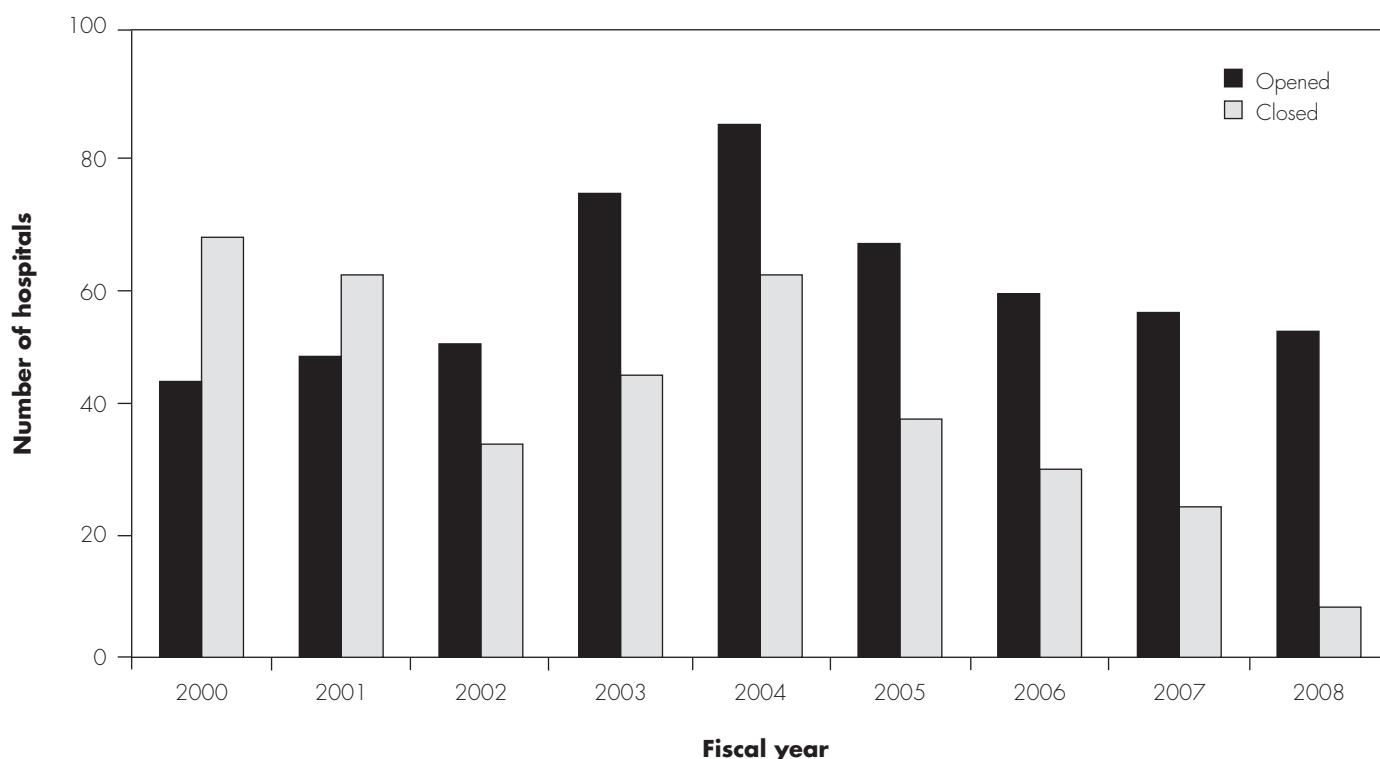
higher growth in outpatient services reflects an ongoing shift of services from an inpatient to an outpatient setting, changes in available technology, and increases in outpatient payments to small rural hospitals as they shift to CAH status.

Medicare's payment systems for inpatient and outpatient services

Medicare's inpatient and outpatient prospective payment systems (PPS) have a similar basic construct. Each has a base rate modified for differences in type of case or service as well as geographic differences in wages. However, in addition to different units of service (bundled services within a hospital stay vs. individual or smaller bundles of outpatient services), each has a somewhat different set of payment adjustments.

Acute inpatient payment system

Medicare's acute inpatient PPS (IPPS) pays hospitals a predetermined amount for most discharges. The payment rate is the product of a base payment rate and a relative weight that reflects the expected costliness of cases in a particular clinical category compared with the average of all cases. The labor-related portion of the payment rate is further adjusted by the hospital wage index to account for differences in area wages. Payment rates are updated annually.

**FIGURE
2A-1****More hospitals opened than closed each year from 2002 to 2008**

Source: MedPAC analysis of CMS Provider of Services file, CMS Hospital Cost Reports, and CMS FY2010 Impact File.

In 2008, CMS implemented a new clinical categorization system called Medicare severity–diagnosis related groups (MS–DRGs). The MS–DRG system classifies patient cases in one of 746 groups, which reflect similar principal diagnoses, procedures, and severity levels. The new severity levels are determined on the basis of whether patients have a complication or comorbidity (CC) associated with the base DRG (no CC, a nonmajor CC, or a major CC).

The acute IPPS includes adjustments to payments for certain cases and for hospitals with specific characteristics. The indirect medical education (IME) adjustment is made to account for the higher costs of patient care in teaching hospitals. Disproportionate share hospital payments are made to hospitals that treat a large share of low-income patients. Outlier payments are made to hospitals that treat patients with unusually high costs. Extra payments are also made to hospitals classified as sole community and Medicare-dependent hospitals.

Finally, certain groups of hospitals, such as CAHs, are exempted from the IPPS and receive cost-based payments.

A more detailed description of the acute IPPS can be found at: http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_hospital.pdf.

Hospital outpatient payment system

The outpatient PPS (OPPS) pays hospitals a predetermined amount per service. CMS assigns each outpatient service to 1 of approximately 800 ambulatory payment classification (APC) groups. Each APC has a relative weight based on its median cost of service compared with the median cost of a midlevel clinic visit. A conversion factor translates relative weights into dollar payment amounts. A more detailed description of the OPPS can be found at: http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_OPD.pdf.

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs efficient hospitals incur, we examine several indicators of payment adequacy. We consider beneficiaries' access to care, changes in the volume of services, changes in the quality of care, hospitals' access to capital, and the relationship of Medicare's payments to hospitals' costs for both average and relatively efficient hospitals. Most of our payment adequacy indicators for hospitals are positive, but profit margins on Medicare patients remain negative for most hospitals.

Beneficiaries' access to care: Access remained positive, as hospital capacity generally grew over period reviewed

We assess beneficiaries' access to care by tracking the number of hospitals participating in the Medicare program, hospital employment, and the proportion of hospitals offering certain specialty and outpatient services. In general, we find that hospitals' capacity to provide most services is improving.

Capacity and supply of providers: Expanding number of hospitals

To examine supply and capacity, we tracked the number of hospitals participating in the Medicare program and the proportion of hospitals offering certain specialty and outpatient services. In general, we found that between 2002 and 2008, hospitals' capacity to provide most services is expanding.

For seven consecutive years, more Medicare-participating acute care hospitals opened than closed (Figure 2A-1). In 2008, 52 hospitals opened and 8 closed. Since 2001, the number of short-term acute care hospitals participating in the Medicare program grew by 200, to roughly 4,800 in 2008. In that year, more than 1,300 of the 4,800 hospitals were CAHs.¹

Hospitals entering the Medicare program in 2008 were on average smaller than those that left the program. Among the 52 hospitals that opened in 2008, the average size was 73 beds. Ninety percent of these hospitals were in urban areas, and 50 percent were for profit. Approximately 15 of the new participants appeared to be specialty hospitals. In contrast, the 8 hospitals that closed had an average size of 172 beds, and all were urban hospitals with more than 50 beds. Because of hospital openings and some expansions,

the number of staffed acute care hospital beds across the nation rose by 1 percent to roughly 754,000 in 2008 (American Hospital Association 2009).

Breadth of services: Specialized services growing

In recent years, short-term general acute care hospitals have continued to expand the scope of services they offer. Our analysis of 12 specialized hospital services from 2004 to 2007 found that the share of hospitals and their affiliates providing each service increased for all but two services (Table 2A-2, p. 46).² Over this period, only the share of hospitals offering urgent care services declined, falling by 2 percentage points to 33 percent of hospitals in 2007.

Volume of services: Outpatient grew, inpatient was fairly constant

To examine changes in volume of services, we used the number of discharges per FFS beneficiary as an indicator of inpatient volume and measured outpatient volume by the number of services per FFS beneficiary. The measurement units differ because the IPPS generally pays for a bundle of services, while the OPPS generally pays for individual services.³ Although volume of services is not an ideal measure of access, increases in the volume of services provided per beneficiary suggest that access did not decline.

Outpatient and inpatient volume

From 2003 through 2008, the volume of outpatient services per FFS beneficiary increased at roughly a 4.5 percent annual rate (Figure 2A-2). Part of the increase was due to a shift in services from inpatient to outpatient settings. For example, services such as pacemaker implantation that once were performed only as an inpatient service are now often done in an outpatient setting.

Another part of the growth is explained by an increase in the volume of observation units (hours of care), which are considered outpatient services. For example, from 2007 to 2008 the growth in the number of observation units per FFS beneficiary increased at a robust rate of 17 percent.⁴

Given the shift of services to the outpatient setting and growth in observation services, we might expect inpatient volumes to decline significantly, but hospitals have been able to maintain a relatively steady volume of Medicare inpatient stays per FFS beneficiary. This finding suggests that hospitals have been able to replace the volume of services lost to the outpatient setting with other inpatient services. Another indicator that at least some hospitals

**TABLE
2A-2****The share of hospitals offering specialized services grew from 2004 to 2007**

Type of specialized service	2004	2005	2006	2007	Percentage point change
Palliative care program	35%	39%	42%	42%	7%
Orthopedic	73	75	78	78	5
Cardiac catheterization	43	47	48	48	5
Magnetic resonance imaging	85	86	89	89	4
Open heart surgery	31	34	34	35	4
Positron emission tomography (PET) scanner	N/A	41	43	45	4*
Bariatric/weight control	27	28	30	30	3
CT scanner	94	94	96	96	2
Hemodialysis	52	53	54	54	2
Emergency department	94	94	96	95	1
Trauma center (level 1 to 3)	42	42	42	42	0
Urgent care center	35	34	34	33	-2

Note: N/A (not available), CT (computed tomography). Data are for services provided directly by community hospitals, which include critical access hospitals in addition to those covered by the acute inpatient and outpatient prospective payment systems.

*Percentage point change in PET scanners is calculated from 2005 to 2007.

Source: American Hospital Association annual survey of hospitals.

want to increase their volumes of Medicare patients is that some hospitals are willing to discount patient deductibles in exchange for being included in medigap plans' preferred provider networks (see online Appendix B to this chapter, available at <http://www.medpac.gov>).

While Medicare discharges per beneficiary remained relatively flat in 2008, Medicare patients' average length of stay continued its slow decline, and overall occupancy rates remained constant as population growth roughly offset declines in length of stay. From 2003 to 2008, across all hospitals, the average length of stay for Medicare patients declined slightly from 5.1 days to 4.9 days. In addition, the aggregate supply of hospital beds and occupancy rates remained steady at 65 percent to 66 percent across all hospitals from 2006 to 2008. In 2008, average occupancy rates were 69 percent for urban hospitals and 51 percent for rural hospitals, though individual occupancy rates varied widely (American Hospital Association 2009).

Quality of care: Most measures showed improvement

Most inpatient hospital quality-of-care measures continued to show improvement. From 2005 through 2008, in-hospital and 30-day mortality rates declined and both process-of-care measures and patient satisfaction

improved. However, patient safety indicators showed mixed results and readmission rates remained fairly constant in recent years.

To assess quality in hospitals, we examined rates of in-hospital mortality and mortality within 30 days after discharge from the hospital as well as the incidence of potentially preventable adverse events resulting from inpatient care. These measures were developed and are maintained by the Agency for Healthcare Research and Quality (AHRQ). Our mortality measures are from AHRQ's inpatient quality indicators (IQIs), and the adverse events measures are from its patient safety indicators (PSIs) (Agency for Healthcare Research and Quality 2007a, Agency for Healthcare Research and Quality 2007b). We used only the IQIs and PSIs that AHRQ concluded—after reviewing its indicators for variation and potential bias—had the strongest evidence base. We calculated the IQIs and PSIs based on all Medicare inpatient claims with specified conditions or procedures in CMS's Medicare Provider Analysis and Review claims data files and risk adjusted these data by using a modified version of the methodology AHRQ uses.

From 2005 through 2008, risk-adjusted in-hospital and 30-day mortality rates declined by a statistically significant amount for each of five conditions we measured: acute

myocardial infarction, congestive heart failure, stroke, hip fracture, and pneumonia. For three procedures we measured—esophageal resection, pancreatic resection, and repair of abdominal aortic aneurysm (AAA)—in-hospital and 30-day mortality rates declined, but in only one instance (in-hospital mortality rate for AAA repair) was the decrease statistically significant.

The rates of adverse events improved from 2005 to 2008 for one of the six conditions we monitored and worsened for two others, with another three showing no statistically significant changes (Table 2A-3). The rates for most of these indicators are extremely small, making it difficult to detect statistically significant changes or trends. All reported trends in patient safety indicators should be viewed with caution, given that changes in coding practices and not just changes in the underlying quality of care could have affected the reported rate (Agency for Healthcare Research and Quality 2007a, Agency for Healthcare Research and Quality 2007b, Agency for Healthcare Research and Quality 2009). The rates and frequency of these events are

**TABLE
2A-3**

**Patient safety indicators
are mixed, 2005–2008**

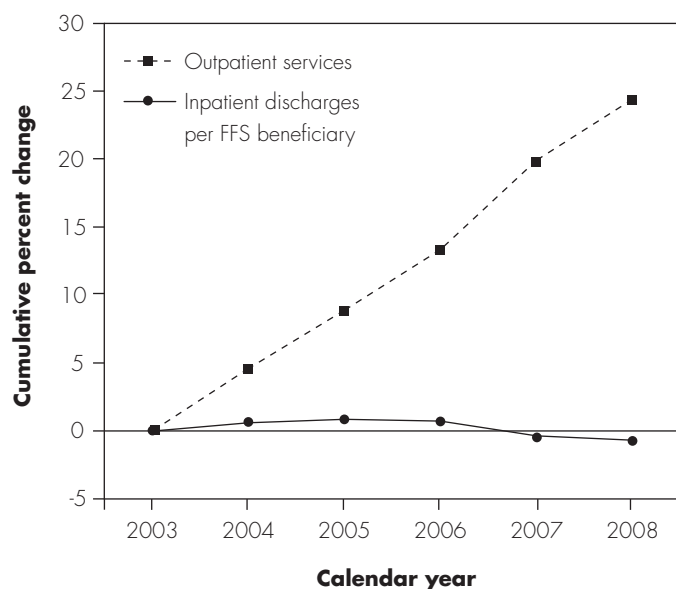
Patient safety indicator	Change in rate 2005 to 2008	Number of events 2008
Postoperative PE or DVT	Worse	46,144
Accidental puncture or laceration	No difference	29,157
Postoperative respiratory failure	Worse	23,073
Iatrogenic pneumothorax	No difference	8,178
Death among surgical inpatients with treatable serious complications	Better	6,345
Postoperative wound dehiscence	No difference	1,365

Note: PE (pulmonary embolism), DVT (deep vein thrombosis). “Better” indicates that the risk-adjusted rate per 10,000 eligible discharges has decreased by a statistically significant amount using a $p=0.01$ criterion. “No difference” indicates that the difference is not statistically significant using a $p=0.01$ criterion. Reported events are not strictly comparable to earlier MedPAC analyses (Medicare Payment Advisory Commission 2008) due to changes over time in the Agency for Healthcare Research (AHRQ) risk-adjustment methodology and changes in measure specifications (e.g., which patients are excluded from the set of eligible cases).

Source: MedPAC analysis of CMS Medicare Provider Analysis and Review data using AHRQ Patient Safety Indicators Version 3.2.

**FIGURE
2A-2**

**Medicare outpatient services grew
while hospital inpatient discharges
per FFS enrollee were fairly
constant from 2003 to 2008**

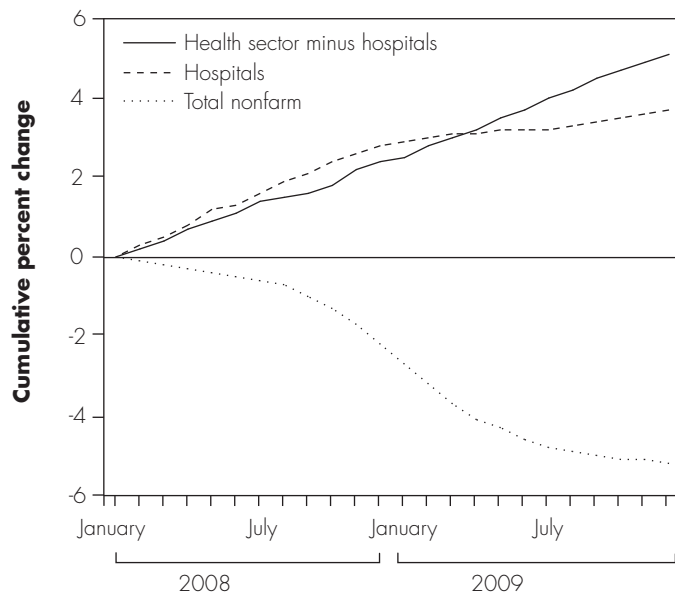


Note: FFS (fee-for-service). Data are for short-term general and surgical hospitals, including critical access and children’s hospitals.

Source: MedPAC analysis of Medicare Provider Analysis and Review and hospital outpatient claims data from CMS.

nevertheless important, as they represent injuries to patients or complications from clinical procedures that often can be avoided with appropriate medical care. The most common adverse events we measured between 2005 and 2008 were postoperative pulmonary embolism and deep vein thrombosis—rare but life-threatening complications of surgery—for which the risk-adjusted rate in our sample of Medicare patients worsened slightly. The second most common event was accidental puncture or laceration, for which the rate did not change significantly over the period reviewed.

Other sources of information on changes in hospital quality generally corroborate our findings. The Commonwealth Fund’s 2009 report entitled “State Scorecard of Health System Performance” analyzed state-level data on process indicators that hospitals reported to CMS as a requirement to receive a full hospital market basket index update (CMS publishes hospital-specific measures on the Hospital Compare website—www.hospitalcompare.hhs.gov). This analysis found that, at the state level, “the quality of hospital care for heart

**FIGURE
2A-3****Hospital employment growth
over the last 24 months**

Note: Data are seasonally adjusted, and employment data for November and December 2009 are preliminary.

Source: Bureau of Labor Statistics, Current Employment Statistics data set.

attack, heart failure, pneumonia, and the prevention of surgical complications improved dramatically, as all states gained ground and the variation across states narrowed” (Commonwealth Fund 2009). The report also noted that substantial room for improvement remained in providing basic care for people hospitalized with these conditions. In addition, a separate report found that patients’ satisfaction with hospitals continued to improve (Press Ganey 2009).

On readmission rates, the Commonwealth Fund found that “30-day hospital readmission rate among all Medicare beneficiaries either failed to improve or increased across most states from 2003–04 to 2006–07.” Our analysis of readmission rates found similar results. The Commission has previously discussed the potential effects that hospitals’ discharge planning and care transition processes can have on readmission rates, which also are affected by the cohesion or fragmentation of care beneficiaries receive in the community (Medicare Payment Advisory Commission 2007, Medicare Payment Advisory Commission 2008).

Hospitals’ access to capital is normalizing

Access to capital allows hospitals to maintain and modernize their facilities. If hospitals were unable to

access capital, it might in part reflect problems with the adequacy of Medicare payments, as Medicare provides about 30 percent of hospital revenues. While access to capital froze in 2008, it has recovered to a normal level.

Our March 2009 report noted that economy wide disruptions in the credit markets had caused hospitals to experience difficulties in accessing capital in the fall of 2008. However, credit markets began recovering in 2009 and are now operating in a more normal manner (Evans 2009). In November 2009, the average interest rate for A-rated hospital municipal bonds (30 year) was 6.13 percent, well below the 7.25 percent rate reported in November 2008 (Cain Brothers 2009). The volume of bond offerings has returned to relatively high levels. Through October 2009, the average rate of bond offerings was \$3.4 billion per month, only slightly lower than the record set in 2008 and on par with the 2007 levels.⁵

Moody’s recently reported that nonprofit hospitals’ median capital spending in 2008 was equal to approximately 1.6 times their depreciation expenses, compared with 1.4 times and 1.5 times in 2006 and 2007, respectively (Moody’s 2009). This trend signifies that most nonprofit hospitals were going beyond replacing worn-out plants and equipment. The two other major rating agencies, Standard & Poor’s and Fitch, reported similar increasing trends in hospitals’ capital expenditures through most of 2008 (Fitch Ratings 2009, Standard & Poor’s 2009).

Recent trends in spending on hospital construction suggest that access to capital remained adequate. The Census Bureau reported that hospital construction increased each year from 1999 to 2008 and that spending on hospital construction doubled from 2000 to 2008, even after adjusting for inflation.⁶ Construction spending totaled nearly \$33 billion in 2008, and the Census Bureau projected that the 2009 level will be similar. Modern Healthcare’s 2009 Construction & Design survey found anecdotal evidence that, while cancelation of ongoing hospital construction projects “remained somewhat rare, more projects are being delayed or reduced in scope” (Robeznieks 2009). This finding may explain why spending leveled off in 2009 after increasing for several years. Looking forward, other surveys of health care construction firms suggest that spending on hospital construction will remain at current levels (Haughey 2009).

While declining interest rates, stable bond issuances, and stable construction are positive indicators of access to capital, it appears that the financial crises of 2008 and

associated decline in credit ratings caused construction spending to level off, ending several years of rapid growth. In 2009, bond rating agencies' evaluations of nonprofit hospitals downgraded more hospital debt than they upgraded. For example, Standard & Poor's downgrades in 2008 represented a 10-year peak, and in 2009 downgrades far outnumbered upgrades through June 1, 2009. Rating agencies attribute 2008 and 2009 downgrades in part to hospitals' recent losses in investment income (Standard & Poor's 2009).

Hospital employment grew in the last two years

Changes in hospital employment levels broadly reflect the capacity of the hospital sector to furnish care and may be a proxy for the sector's overall financial health (Figure 2A-3). Over the past two years (January 2008 to December 2009), the Bureau of Labor Statistics reports that hospitals' employment increased 3.7 percent to more than 4.7 million employees, with all but one state showing increased hospital employment during the period. Over two years, employment grew in patient care and non-patient care occupations (registered nurses (RNs) 6 percent (equal to 85,000 more RNs), pharmacists 6 percent, diagnostic sonographers 11 percent, nuclear medicine technicians 8 percent, and business and financial operations 10 percent). Employment of licensed practical nurses (LPNs) declined by 4.7 percent (8,000 fewer LPNs) as hospitals continued to move toward nurses with higher levels of education. While hospital employment has grown over the past two years on average, the employment trend has not been consistent during this period. From roughly December 2008 to August 2009, hospital employment levels stagnated. Employment levels began to grow again in aggregate in September through December of 2009, but there are reports of individual hospitals reducing the number of employees.

Medicare payments and providers' costs: 2008 margins declined as cost growth outpaced growth in payments

In assessing payment adequacy, the Commission also considers the estimated relationship between Medicare payments and hospitals' costs for furnishing care to Medicare patients. We assess the adequacy of Medicare payments for the hospital as a whole, and thus our primary indicator of the relationship between payments and costs is the overall Medicare margin. This margin includes all payments and Medicare-allowable costs attributable to Medicare patients for the six largest services that hospitals provide plus graduate medical education.

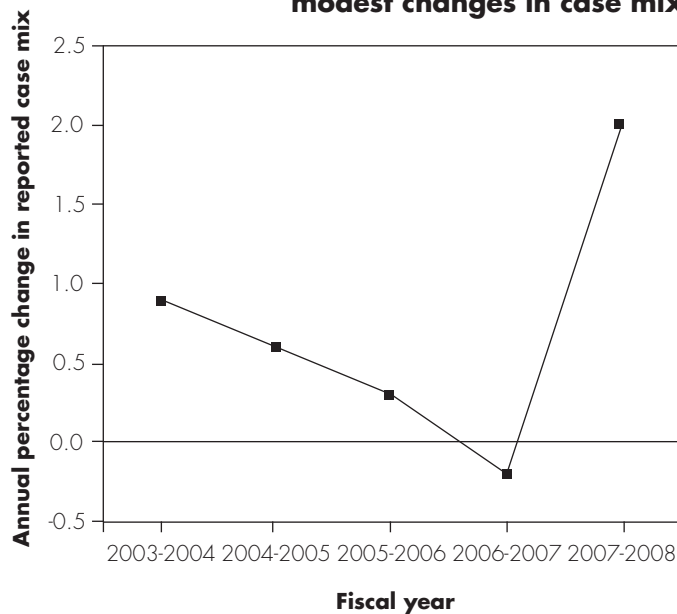
We report the overall margin on services to Medicare patients across service lines because no hospital service is a purely independent business. For example, operating a skilled nursing facility (SNF) can improve the profitability of acute care services when an in-hospital SNF allows hospitals to safely discharge patients sooner from their acute care beds. In addition, there are cost allocation issues, such as allocating a portion of a hospital's administrative costs to a home health subsidiary, which may distort the profit margins of both the home health agency and the hospital. Only by combining data for all major services can we estimate Medicare margins without the influence of how overhead costs are allocated. The hospital update recommendation in this chapter will apply to hospital inpatient and outpatient payments; payments for the other distinct units of the hospital such as a SNF are governed by payment rates for those payment systems.

Documentation and coding improvements contributed to a rise in payments per discharge in 2008

Growth in Medicare hospital payments per discharge depends primarily on the annual payment updates and changes in reported case mix. In 2008, the weighted average of the operating and capital payment updates was roughly 3 percent. However, inpatient payments per discharge increased by 4.5 percent. The difference between the update and payment growth was primarily due to reported increases in case mix. An analysis by CMS and a separate analysis by the Commission have concluded that the reported jump in case mix was due to hospitals' documentation and coding improvements (DCI) in response to the financial incentives associated with CMS's adoption of MS-DRGs in 2008 (Centers for Medicare & Medicaid Services 2009, Medicare Payment Advisory Commission 2009b). That is, the change in reported case mix reflected improvements in coding and not an actual shift toward patients whose care required greater resources. Under MS-DRGs, hospitals receive higher relative weights and payments if they report more detailed information on patients' complications and comorbidities. Once hospitals were given an incentive to report more detailed information, they did so. The result was a sharp increase in reported case mix (Figure 2A-4, p. 50). Reported case mix grew by 2 percent and we found DCI of 2.5 percent, suggesting a net decline in real case mix of roughly 0.5 percent. The net effect of the improved coding was an overpayment of 1.9 percent for inpatient services in 2008 (Medicare Payment Advisory Commission 2009a). Under current law, these overpayments will have to be

**FIGURE
2A-4**

Until fiscal year 2008, recent changes in Medicare inpatient hospital payments reflected modest changes in case mix



Note: IPPS (inpatient prospective payment system). Changes in case mix are based on national aggregate case-mix indexes calculated for the cohorts of hospitals included in the IPPS in each pair of years.

Source: MedPAC analysis of annual Medicare Provider Analysis and Review claims for IPPS hospitals for fiscal years 2004–2008 from CMS.

repaid through reduced payments in the future. For more details on DCI see online Appendix A to this chapter.

Hospital cost growth increased in 2008 as underlying input prices also rose

Medicare inpatient costs per discharge increased at a faster rate (5.5 percent) in 2008 than in 2007 (Table 2A-4).

**TABLE
2A-4**

Cost growth increases in 2008

Type of cost	Annual cost growth		
	2006	2007	2008
Inpatient costs per discharge	5.1%	4.2%	5.5%
Outpatient costs per service	2.6	5.6	5.1
Weighted average	4.6	4.5	5.4

Note: The cost growth numbers are not adjusted for reported changes in case mix. Analysis excludes critical access hospitals and Maryland hospitals. The weighted average is based on hospitals' inpatient and outpatient Medicare costs.

Source: MedPAC analysis of Medicare Cost Report and claims files from CMS.

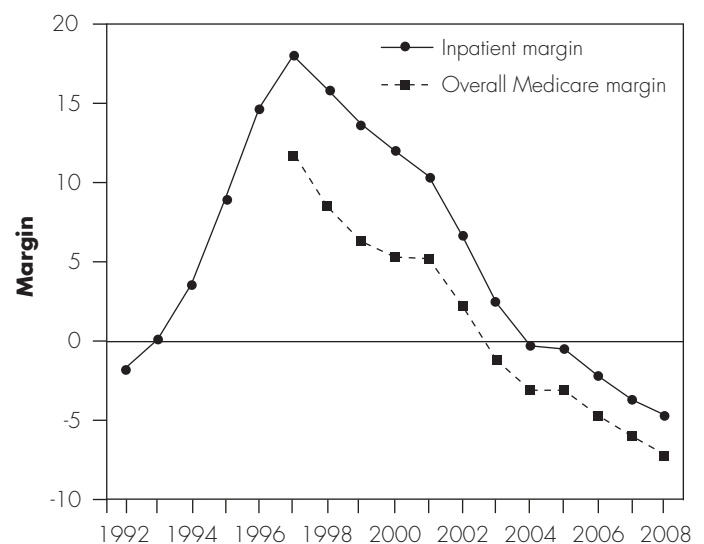
4). The jump in cost growth in 2008 was partly due to higher underlying input price inflation, which climbed 4.3 percent in 2008, up from 3.4 percent in 2007. Outpatient cost growth was slightly lower than inpatient cost growth, resulting in a 5.4 percent weighted average increase per unit for inpatient and outpatient services in 2008.

Trend in the overall Medicare margin

We define Medicare profit margins as Medicare payments minus the allowable costs of treating Medicare patients, all divided by Medicare payments. The overall Medicare margin has trended downward since 1997 and has been negative since 2003 (Figure 2A-5).⁷ From 2007 to 2008, the overall Medicare margin fell from –6.0 percent to –7.2 percent. The overall margin is dominated by inpatient and outpatient services, which represent 92 percent of hospitals' Medicare revenues. The margin on Medicare inpatient services fell from –3.7 percent to –4.7 percent, and outpatient margins fell from –11.6 percent to –12.9 percent (Table 2A-5). The drop in margins is primarily due to high cost growth in 2008. Inpatient cost growth

**FIGURE
2A-5**

Medicare inpatient and overall Medicare margins



Note: A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. Analysis excludes critical access and Maryland hospitals. Medicare inpatient margins include services covered by the acute inpatient prospective payment system. Overall Medicare margin covers acute inpatient, outpatient, hospital-based home health and skilled nursing facility (including swing bed), and inpatient psychiatric and rehabilitation services, plus graduate medical education.

Source: MedPAC analysis of Medicare Cost Report file from CMS.

**TABLE
2A-5****Hospital Medicare margins**

Measure	2004	2005	2006	2007	2008
Inpatient	-0.3%	-0.5%	-2.2%	-3.7%	-4.7%
Outpatient	-10.7	-9.1	-10.9	-11.6	-12.9
Overall Medicare	-3.1	-3.1	-4.7	-6.0	-7.2

Note: Data are for all hospitals covered by Medicare acute inpatient prospective payment system in 2008. A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. Overall Medicare margin covers acute inpatient, outpatient, hospital-based skilled nursing facility (including swing bed) and home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education.

Source: MedPAC analysis of Medicare Cost Report file from CMS.

(5.5 percent) was almost 3 percentage points higher than the payment update in 2008, and this 3 percentage point differential more than offset the almost 2 percent increase in inpatient payments that occurred due to documentation and coding improvements. The net result was approximately a 1 percentage point decline in inpatient and outpatient margins. While inpatient and outpatient revenues represent 92 percent of all Medicare revenues, declines in rehabilitation and psychiatric unit margins also contributed slightly to the drop in 2008 overall Medicare margins.

2008 Medicare margins by hospital type

We examined further breakouts of the overall Medicare margin by hospital type. In 2008, the overall Medicare margin for rural hospitals was about 1 percentage point higher than the margin for urban hospitals (Table 2A-6). The slower decline in rural margins is due to two factors: the conversion of many small, low-margin rural hospitals to CAH status and provisions in the Deficit Reduction Act that allowed small rural Medicare-dependent hospitals to use higher costs per discharge from a more recent base year (2002) to calculate their hospital-specific rates and also increased the cap on their disproportionate share payments. We expect this differential will have grown in 2009, as many sole community hospitals received higher payments through a recent policy change that allowed the use of higher costs per discharge from a more recent base year (2006) to calculate their hospital-specific rates (see text box on pp. 52–53).

CAHs, which are not included in our margin calculations, are under a cost-based reimbursement system that pays 1 percentage point more than costs for inpatient, outpatient,

and swing bed post-acute care services. These 1,300 hospitals account for about 30 percent of all Medicare payments to rural hospitals. If we include CAHs in our overall margin calculation, the overall Medicare margin for rural hospitals in 2008 would be 1.9 percentage points higher, or -4.5 percent.

Profit margins at for-profit hospitals continued to remain above those for nonprofit hospitals. In 2008, for-profit hospitals' Medicare margins improved relative to nonprofit hospitals' margins primarily because for-profit hospitals had much lower growth in costs per discharge (3.3 percent per discharge) than nonprofit hospitals (5.8 percent per discharge).

The overall Medicare margin for major teaching hospitals fell below zero (-1.5 percent) for the first time in 2008. The drop in margin for major teaching hospitals was due in large part to per case costs increasing much faster (6.7 percent) than payments (4.5 percent). Major teaching hospitals saw both inpatient and outpatient Medicare margins fall by 2 percentage points in 2008. Major

**TABLE
2A-6****Overall Medicare margins
by hospital group**

Hospital group	2004	2005	2006	2007	2008
All hospitals	-3.1 %	-3.1%	-4.7%	-6.0%	-7.2%
Urban	-3.0	-3.1	-4.7	-6.1	-7.3
Rural (non-MSA)	-3.3	-2.8	-4.5	-5.4	-6.4
Nonprofit	-3.6	-3.7	-5.4	-6.7	-8.2
For profit	-1.6	-1.3	-2.4	-3.6	-2.9
Government	-1.9	-1.2	-3.1	-4.7	-6.0
Major teaching	4.6	4.6	2.8	0.6	-1.5
Other teaching	-3.4	-3.8	-5.3	-6.5	-7.4
Nonteaching	-7.0	-6.7	-8.2	-9.2	-10.0

Note: MSA (metropolitan statistical area). Data are for all hospitals covered by the Medicare acute inpatient prospective payment system in 2008. A margin is calculated as payments minus costs, divided by payments; margins are based on Medicare-allowable costs. Overall Medicare margin covers acute inpatient, outpatient, hospital-based skilled nursing facility (including swing bed) and home health, and inpatient psychiatric and rehabilitation services, plus graduate medical education. Margins for government hospitals should be interpreted with caution given the unique financing circumstances of some government providers. The margins do not include critical access hospitals, which are not part of the inpatient prospective payment system; if they were included, rural margins would have been -4.5 percent in 2008.

Source: MedPAC analysis of Medicare Cost Report file, Medicare Provider Analysis and Review, and impact file from CMS.

Policy changes between 2008 and 2010 increase some payments and decrease others

A number of payment policy changes in recent years affect our projection of 2010 hospital margins as well as our ability to project margins beyond 2010. We summarize the policy changes affecting inpatient and outpatient payments below.

Inpatient payments

CMS and the Congress made a variety of policy changes affecting the acute inpatient prospective payment system (IPPS) for fiscal year (FY) 2009 and FY 2010. In response to a Commission recommendation, CMS implemented Medicare severity–diagnosis related groups (MS–DRGs), a new patient classification system that better captures severity-of-illness differences among patients and hospitals. CMS phased in MS–DRGs beginning in 2008 and fully implemented the new system in 2009. CMS and the Commission found that hospitals responded to the financial incentives of the MS–DRG system by improving medical record documentation and diagnosis coding, which resulted in assignment of cases to higher weighted MS–DRGs. Because this change in assignments increased payments without an accompanying increase in resources used, it resulted in an unintended increase in payments. As a part of the TMA, Abstinence Education, and QI Programs Extension Act of 2007 (TMA), the Congress mandated payment reductions of 0.6 percent in 2008 and an additional 0.9 percent in 2009 to offset the

effects of coding improvements projected by the CMS Office of the Actuary. To the extent that the reductions in the TMA differ from the actual effects of hospitals' coding improvements, the Secretary of the Department of Health and Human Services is required by law to adjust hospital payments in 2010, 2011, and 2012 to ensure that adoption of the MS–DRGs is budget neutral. In the 2010 IPPS final rule, CMS decided not to make an adjustment to FY 2010 payments to offset the effects of coding improvements in previous years or to offset effects of coding improvements in 2010 and future years. CMS opted to wait for FY 2009 claims data to become available to determine how to adjust payment rates to recoup excess spending for FY 2008 and FY 2009 and to prevent further overpayments in FY 2010 and beyond. As a result, current law requires the full adjustment for documentation and coding improvements to be made in 2011 and 2012. For more on the future policy impact of documentation and coding improvements, see online Appendix A to this chapter.

Hospitals may qualify for reclassification to a different labor market for purposes of the wage index. Section 508 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 gave eligible hospitals an opportunity for a one-time reclassification to a different labor market and allowed this change to increase their payments. CMS estimated that the expiration of this provision at the end of FY 2009 will lower

(continued next page)

teaching hospitals, however, continue to have much higher overall Medicare margins than the average IPPS hospital. In large part, this difference is due to the extra inpatient payments they receive through the IME and disproportionate share adjustments. Commission analysis shows that both these adjustments provide payments substantially larger than the estimated effects that teaching intensity and service to low-income patients have on hospitals' average costs per discharge (see the section on IME adjustment on p. 54). Nonteaching hospitals, most of

which are in urban areas, had the lowest Medicare margins of any hospital group.

Projected margins under current 2010 payment policies

We estimate that the overall Medicare margin in 2010 (given 2010 policies) would be –5.9 percent, 1.3 percentage points higher than in 2008.⁸ Our projection reflects the effects of policy changes occurring between 2008 and 2010 (as summarized in the text box) and other factors affecting hospital revenues and costs over that

Policy changes between 2008 and 2010 increase some payments and decrease others (cont.)

overall hospital payments in FY 2010 by \$200 million compared with payments that would have been made.

Rural hospitals

The Congress has established several special payments for rural hospitals that continue to evolve and affect Medicare spending. Effective January 1, 2009, the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) rebased payments to sole community hospitals (SCHs) to allow use of the FY 2006 base year for calculating the hospital-specific rate.⁹ CMS actuaries estimated that this policy will add \$140 million in spending for the portion of FY 2009 when it will be in effect and \$550 million for all of FY 2010 (Centers for Medicare & Medicaid Services 2008). The SCH provisions will significantly increase rural hospital margins given that 48 percent of rural IPPS hospitals are SCHs.

Outpatient payments

Currently, rural hospitals with 100 or fewer beds receive hold-harmless outpatient payments. Payment rates for these hospitals are based on the higher of current outpatient prospective payment system rates or the hospital's historic payment-to-cost ratio. MIPPA extended hold-harmless payments through 2009 to small rural hospitals and SCHs, but aggregate outpatient payments are expected to decline in 2010 after the hold-harmless provision expires.

Health information technology

The American Recovery and Reinvestment Act of 2009 provided payment incentives to encourage hospitals and other providers to adopt electronic health record (EHR) technology. These health information technology (HIT) payments are scheduled to begin in 2011 and to occur each year until 2017. Under the law, a hospital will receive a HIT payment for each year it is deemed a meaningful user of HIT—presumably based on meeting certain criteria concerning the capabilities of its EHR system. The payment will be equal to an initial payment amount per hospital (\$2 million base amount) plus a discharge-related amount of \$200 per patient discharge for all discharges between the 1,150th and 23,000th discharge, both multiplied by the hospital's share of Medicare patients. The Congressional Budget Office (CBO) roughly estimated that the Medicare HIT provision will result in \$1.5 billion in payments to hospitals in FY 2011 and a total of \$8.7 billion from 2011 to 2019.¹⁰ The law also stipulates that, after a period of years, hospitals that fail to meet the meaningful use criteria will be penalized through the IPPS. CBO roughly estimates that these penalties will begin in FY 2015, totaling \$200 million in 2015 and \$2.6 billion through the end of FY 2019 (Congressional Budget Office 2009). Until we know what the requirements will be for hospitals to meet the “meaningful use” criteria and receive HIT payments, there will be significant uncertainty about the timing and level of HIT payments. ■

two-year period. We expect margins to rise for two key reasons:

- Projected 2009 cost growth is lower than the payment update in 2009, although it is unlikely that cost growth will remain below the update in 2010.
- Gains from documentation and coding improvements will continue, without equivalent budget-neutrality adjustments to offset the increased payments in 2009 and 2010.

The next section, on cost growth, discusses some of the reasons why we believe cost growth fell in 2009 and why it may rise again in 2010. The effects of documentation and coding improvement are discussed in online Appendix A to this chapter.

Looking forward: Hospital cost growth appears to have slowed in 2009

We expect that the growth rate in hospital costs slowed in 2009. While 2009 Medicare cost report data are not available, we have partial year data from the Census

Bureau through June 2009 and from certain hospital systems with publicly traded stocks or bonds for the nine months ending in September 2009.¹¹ These data sources suggest that cost growth per discharge slowed in 2009 to between 1 percent and 3 percent, compared with 5.5 percent growth in 2008. One factor contributing to the slower growth in 2009 was lower input price inflation, estimated at 2.2 percent. Another factor was increasing fiscal pressure from the recession and declining investment portfolios, which appears to have led to better cost control in 2009. Looking forward to 2010, there is considerable uncertainty, but data from the census and for-profit systems indicate that hospital profitability has rebounded in 2009 (Census Bureau 2009). If profits return close to trend in 2009, cost growth may return to trend in 2010.

Indirect medical education adjustment

Medicare makes two types of special payments to teaching hospitals: direct medical education and IME payments. Direct graduate medical education payments, which totaled about \$3 billion in 2008, are designated to pay for Medicare's share of the direct costs of teaching, such as residents stipends, salaries for faculty, and related programs' overhead expenses. The IME adjustment provides teaching hospitals with higher per case payment rates to pay for the indirect effects of teaching (e.g., residents learning by doing, unmeasured patient severity) on hospitals' costs. Medicare IME payments totaled \$6.5 billion in 2008. The IME adjustment currently increases per case operating payments about 5.5 percent per 10 percent increment in the ratio of residents to hospital beds. The IME adjustment, however, has been set considerably above the estimated cost relationship between residents and inpatient costs per case—analysis of 2008 cost reports shows that teaching hospitals costs per case (operating and capital combined) increase about 2 percent for every 10 percent increment in the ratio of residents to beds, a result consistent with our prior analysis based on 2004 data (Medicare Payment Advisory Commission 2007). In other words, the current IME adjustment is set at more than twice the level that can be empirically justified.

Over the past year, the Commission has had extensive discussions on how physicians are trained and whether changes are needed in how Medicare supports teaching hospitals and graduate medical education programs. In addition to further analysis of how and how much Medicare should pay for the direct and indirect costs of medical education, the Commission will continue to

discuss potential reforms that may encourage teaching hospitals to prepare a balanced mix of health professionals ready to meet society's need for coordinated, efficient, high-quality health care. We anticipate addressing these issues in a future Commission report.

Private-payer profits, cost growth, and Medicare margins

The level of hospitals' private-payer profits has been cyclical. During the first cycle (1986–1992), most insurers still paid hospitals on the basis of their charges, with little price negotiation or selective contracting. With limited pressure from private payers, hospital margins on private-payer business increased rapidly. In the second cycle (1993–1999), health maintenance organizations (HMOs) and other private insurers began to negotiate more assertively with hospitals, and most insurers switched to paying for inpatient services on the basis of DRGs or flat per diem amounts for broad types of services. As a result, hospitals' payment-to-cost ratio for private payers declined by 16 percentage points. However, by 2000, hospitals had regained the upper hand in price negotiations because of hospital consolidations and consumer backlash against managed care. In the third cycle (2000–2007), private-payer payment rates rose rapidly and hospitals' payment-to-cost ratio for private payers increased more than 16 percentage points. In 2007, private payers on average paid hospitals more than 132 percent of their costs. As we have discussed in the past, when profits on privately insured patients are high, hospitals face less pressure to constrain costs (Medicare Payment Advisory Commission 2009b).

Over the past 20 years, hospital cost growth has moved in parallel with margins on private-payer patients. Because managed care restrained private-payer payment rates, hospitals' rate of cost growth was below input price inflation from 1994 through 2000 (Figure 2A-6). However, from 2001 through 2008, after private-payer profits increased, hospitals' rate of cost growth was higher than the rate of increase in the market basket index. Thus, Medicare margins have declined.

Due to high private-payer payments, all-payer margins for hospitals reached 6.1 percent in 2007, the highest level recorded since 1997. However, the picture changed rapidly in September 2008 with the collapse of the bond and stock markets. Total all-payer margins in 2008 fell to 1.9 percent, the lowest level in more than a decade. Even operating margins for all payers, which exclude investment income, fell from 4.4 percent to 1.6 percent, reflecting

the strong cost growth in 2008 without a compensating increase in average payment rates from hospitals' mix of insured and uninsured patients.

Hospital-level financial pressure and hospital costs The effect of financial pressure on hospitals' costs is not only evident over time, it is also evident when comparing hospitals facing different levels of financial pressure to constrain costs. Some hospitals have strong profits on non-Medicare services and investments and are under little pressure to constrain their costs. Other hospitals, with thin profits on non-Medicare services, face overall losses (and possibly closure) if they do not constrain costs and generate profits on Medicare patients. To determine whether financial pressure leads to lower costs, we grouped hospitals into three levels of financial pressure from private payers: high, medium, and low. We then tested whether hospitals under high levels of financial pressure from 2003 to 2007 ended up with lower standardized inpatient costs per discharge in 2008 than hospitals under medium and low levels of financial pressure during the same five-year period.

We defined high-pressure hospitals as those that met two criteria:

- Median non-Medicare profit margin was 1 percent or less from 2003 to 2007. Non-Medicare margins reflect the sum of net profit (or loss) on private-payer, Medicaid, self-pay, and charity cases, as well as nonpatient revenues and costs.
- Net worth would have grown by less than 1 percent per year from 2003 to 2007 if the hospital's Medicare profits had been zero. This situation would indicate that the hospital depended on Medicare profits to grow its net worth.

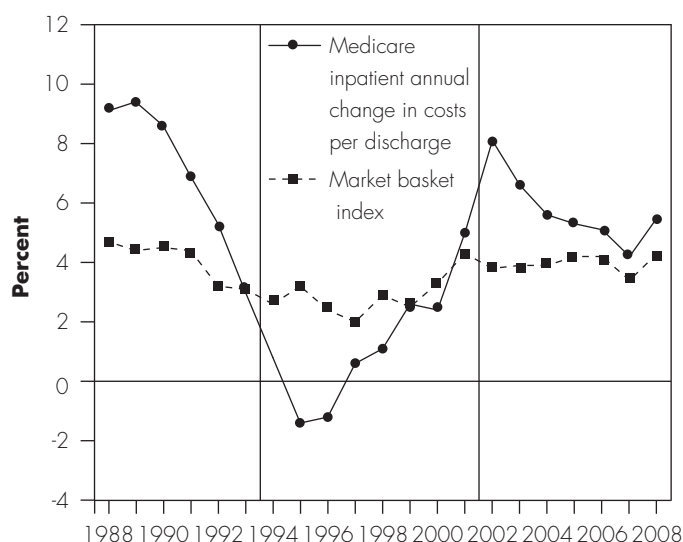
We defined low-pressure hospitals as those that could grow their net worth even if they suffered Medicare losses. Low-pressure hospitals met the following two criteria:

- Median non-Medicare margin was greater than 5 percent from 2003 to 2007.
- Net worth would have grown by more than 1 percent per year if the hospital's Medicare profits were zero. This condition would indicate that the hospital did not depend on Medicare profits to grow its net worth.

Findings on financial pressure We found that hospitals under high financial pressure from 2003 to 2007 restrained their Medicare standardized costs per discharge in 2008 to

**FIGURE
2A-6**

Costs have risen faster than the market basket since 2001



Note: The market basket index measures annual changes in the prices of the goods and services hospitals use to deliver care.

Source: Medicare analysis of Medicare Cost Report files from CMS and annual final rules for the inpatient prospective payment system from CMS.

91 percent of the national median, while hospitals under low financial pressure had 2008 median standardized costs equal to 104 percent of the national median (Table 2A-7, p. 56). However, the difference was less pronounced among for-profit hospitals. For-profit hospitals under high pressure had median Medicare standardized costs at 92 percent of the national median, while for-profit hospitals under low financial pressure had standardized costs equal to 99 percent of the national median. This finding suggests that for-profit hospitals constrain costs even when they are under little financial pressure. Put differently, if both types of hospitals receive high rates from private payers, the higher revenues will tend to be reflected as higher costs in nonprofit hospitals, but in for-profit hospitals a larger share of the revenue is retained as profits for shareholders.

Comparing this year's findings about hospitals under financial pressure with the last two years' work, we find consistent results. A difference worth highlighting is that the share of hospitals under financial pressure declined from 2005 to 2007 (from 32 percent to 26 percent of all hospitals) due to a steady increase in non-Medicare margins through 2007. However, this trend halted in 2008 when many hospitals had significant losses on

**TABLE
2A-7****High financial pressure leads hospitals to constrain costs****Level of financial pressure 2003 to 2007**

	High pressure	Medium pressure	Low pressure
2008 financial characteristics (medians)			
Non-Medicare margin (private, Medicaid, uninsured)	-5.1%*	1.9%	9.1%
Standardized cost per Medicare discharge (as a share of the national median), 2008			
All (for-profit and nonprofit) hospitals	91*	96	104
Nonprofit hospital	90*	95	105
For-profit hospital	92	98	99
Growth in cost per discharge 2005 to 2008	5.2	4.9	5.5
Overall 2008 Medicare margin	3.7*	-2.5	-12.1
Patient characteristics (2008 medians)			
Total hospital discharges	4,812*	8,236	7,318
Medicare FFS share of inpatient days	44%	43%	45%
Medicaid share of inpatient days	12.5*	10.9	10.5
Medicare case-mix index	1.28*	1.41	1.41
Hospital characteristics, 2008			
Number of:			
All hospitals	740	391	1,742
Rural hospitals	243	103	503
For-profit hospitals	187	52	348
Major teaching hospitals	125	42	88
Share of:			
All hospitals	26%	14%	61%
Rural hospitals	29	12	59
For-profit hospitals	32	9	59
Major teaching hospitals	49	16	35

Note: (FFS) fee-for-service. Standardized costs are adjusted for hospital case mix, wage index, outliers, transfer cases, interest expense, and the effect of teaching and low-income Medicare patients on costs per discharge.

* Indicates significantly different from low-pressure hospitals using $p=0.01$ and a Wilcoxon rank test. A Wilcoxon rank test is used to limit the influence of the few hospitals that report very low or very large costs per discharge.

Source: MedPAC analysis of Medicare Cost Report and claims files from CMS available as of August 2009.

their investment portfolios and experienced low overall profitability. Due to the decline in profits in 2008, financial pressure should have been higher when 2009 budgets were set and we expect to see a decline in the average hospital's rate of cost growth from 2008 to 2009.

Hospitals under high financial pressure tend to be those with smaller operations, a lower case-mix index, and a

higher share of patients covered by Medicaid. This mix of characteristics can lead to financial pressure, which can force hospitals to constrain costs. As we found last year, the set of hospitals under a high level of financial pressure includes hospitals in different locations (rural and urban) and teaching hospitals as well as nonteaching hospitals. Although the need to constrain costs can be a positive effect of financial pressure, a concern is whether hospitals

can constrain costs and still deliver high-quality care. We explore this issue next.

Exploring hospital efficiency

The goal of our analysis of relatively efficient hospitals is to examine the group of hospitals that perform relatively well on both cost and quality metrics while serving a broad spectrum of patients. We examine hospital-level mortality, readmission, and inpatient cost metrics; providers' payer mix; and the annual level of total FFS Medicare service use per capita in the county where the hospital is located. As data and risk-adjustment methodologies improve, our measures of efficiency will continue to evolve.

Ideally, we would want to limit our set of efficient hospitals to those that not only have high in-hospital quality and low unit costs but also help their patients transition to good post-acute outcomes and restrain the overall costs to the Medicare system during the year. While there is a promising data source that computes average annual Medicare service use for patients associated with specific hospitals, the risk adjustment and standardization of those data still need refinement before we can use them to make cross-sectional comparisons of efficiency.¹² Therefore, we are limited to using county-level annual Medicare service use as a second-best proxy for annual resource use. To avoid having hospitals from high-use areas in our analysis, we removed hospitals from the population studied if they were located in counties in the top 10 percent of annual Medicare service use.¹³ As a result, the chance of a hospital appearing to have low unit costs of service simply due to being in an area with a high volume of service use per beneficiary is reduced.

There has also been some concern that hospitals may achieve low unit costs and relatively good outcomes if they are in a market with relatively wealthy patients. Wealthy patients may have more resources available to them outside of the hospital and fewer unmeasured comorbidities. Others have raised this concern, and to be conservative we further restricted our population of hospitals that we evaluate for efficiency by removing the 10 percent of hospitals with the lowest share of Medicaid patients. This process reduces the likelihood that hospitals in our efficient group got there by patient selection.

Our goal in this screening process is to improve our ability to identify hospitals that can provide good outcomes at a reasonable cost while serving a broad spectrum of patients

(including Medicaid) without driving up the overall volume of hospital and nonhospital services provided.

Categorizing hospitals as relatively efficient

We categorized hospitals into the relatively efficient group or the control group based on each hospital's performance on a set of risk-adjusted cost and quality metrics during the period 2005–2007. We then examined the performance of the two hospital groups during fiscal year 2008.

We focused on mortality and readmission rates as indicators of quality. Though driven in part by data limitations, this decision was also grounded in the perspective that outcome measures such as mortality and readmission rates reflect elements of hospitals' quality of care not captured by individual process-of-care measures (Krumholz et al. 2007). We used a 30-day risk-adjusted mortality rate that is composed of Medicare mortality rates for six conditions adjusted for the patient's age, sex, and severity of condition based on a risk-adjustment methodology developed by AHRQ.¹⁴ All six measures are endorsed by the National Quality Forum for use in a composite index of mortality.

The readmission measure, developed by 3M, adjusts for the severity of the patient's illness and removes clearly unrelated readmissions such as certain malignancies and trauma (3M Health Information Systems 2008, Goldfield et al. 2008). We measured readmissions from 2005 through 2007; hospitals with risk-adjusted readmission rates in the top one-third in any year were removed from our efficient provider list.

When comparing costs, we adjusted Medicare inpatient costs per discharge for factors that were beyond the hospital's control and that reflected the hospital's financial structure rather than its efficiency. Specifically, we standardized Medicare costs by adjusting for MS–DRG case mix, area wage index, prevalence of outliers and transfer cases, and the empirically estimated effects of teaching activity and service to low-income Medicare patients on costs per discharge. We also adjusted for differences in interest expenses because such differences can reflect whether a hospital is financed with debt or equity rather than reflecting its operational efficiency.

To rank providers based on performance, we divided the distributions among hospitals of risk-adjusted mortality, readmissions, and standardized Medicare costs per discharge into thirds (low, medium, and high) for each year 2005–2007. We placed a hospital in the relatively efficient group if it met the following four criteria:

- risk-adjusted mortality levels are in the best two-thirds every year (2005–2007),
- risk-adjusted readmission rates are in the best two-thirds every year (2005–2007),
- standardized costs per discharge are in the best two-thirds every year (2005–2007), and
- either risk-adjusted mortality rates or standardized costs are in the best one-third every year (2005–2007).

The objective is to identify hospitals that consistently performed at an above-average level on at least one measure (cost or quality) and always performed reasonably well on all three measures.

To limit our set of relatively efficient hospitals to those that have consistently delivered high-quality care at a reasonable cost, we identify hospitals that performed well on quality and cost metrics every year from 2005 through 2007. We do not categorize hospitals' costs or quality based on a single year's performance because their quality or cost rankings for an individual year could be better than average due to random variation. After we categorize hospitals in the relatively efficient set or the control group with three years (2005–2007) of data, we compare the performance of these two groups with the most recent data available (2008). We compare performance by using a different year than the data used to categorize hospitals so that a single errant value will not affect both the categorization and the score of the efficient hospital group relative to the control group.¹⁵

Comparing 2005 and 2007 performance of relatively efficient and other hospitals Before comparing 2008 data, we first identify the set of providers that historically had strong performance on our efficiency measures during 2005–2007. Our population of hospitals with complete data consisted of 2,718 hospitals. After screening out the 10 percent of hospitals in counties with the highest annual service use per Medicare patient and the 10 percent of hospitals with the lowest Medicaid shares, there are 2,209 hospitals in our sample that were evaluated on their cost and quality of care. Of the 2,209 hospitals, 218 were found to be relatively efficient during 2005–2007. The set of relatively efficient providers includes a diverse array of hospitals, including large teaching hospitals and smaller rural hospitals. Some hospitals are in relatively prosperous communities; other hospitals have Medicaid shares in excess of 30 percent. Sixty-one percent of the relatively efficient hospitals report being part of a system that owns

or manages at least one physician practice (American Hospital Association 2009). In contrast, 42 percent of the control group report owning or managing at least one physician practice. While we find that both low- and high-volume hospitals can meet the efficiency criteria, the data suggest that, on average, higher volume hospitals tend to have lower mortality rates; therefore, they are more likely to meet our efficient hospital criteria. This finding is consistent with the literature (Birkmeyer et al. 2002, Halm et al. 2002, Keeler et al. 1992). CAHs were excluded from the analysis because they are not paid under the PPS.

We examined the performance of the relatively efficient hospitals by reporting the group's median performance divided by the median for our whole set of 2,209 hospitals on all three performance measures. For example, the efficient hospitals' relative risk-adjusted 30-day mortality rate from 2005 to 2007 is 81 percent of the national median (Table 2A-8), meaning that the typical hospital in the efficient group had a risk-adjusted 30-day mortality rate that was 19 percent below the national median. Likewise, the efficient group had a median standardized cost per discharge equal to 91 percent of the national median during 2005–2007. Median readmission rates for the efficient group were 95 percent of the national median during 2005–2007.

Historically strong performers have lower mortality and readmissions in 2008 Because no method of risk adjustment is perfect, we examined the performance of the relatively efficient hospitals by using an array of different risk-adjusted mortality measures. The composite mortality levels remained 19 percent below the national median. In addition to the composite AHRQ 30-day mortality measure, we reported on three risk-adjusted 30-day mortality rates developed by CMS (for acute myocardial infarction, congestive heart failure, and pneumonia). The 2008 mortality levels for the specific conditions measured by CMS were more than 5 percent lower for the historically efficient group. For example, the median efficient provider's risk-adjusted heart failure mortality rate was 95 percent of the 2008 national median, compared with 102 percent of the national median for the median provider in the comparison group. Readmission rates for relatively efficient providers were between 1 percent and 5 percent lower than the national median. The relatively efficient group also performed similarly to other hospitals on patient satisfaction. The share of patients who gave the median hospital a top rating was 64 percent for the relatively efficient group and 63 percent for the comparison group.

**TABLE
2A-8****Characteristics of traditionally high performing hospitals**

	Type of hospital	
	Relatively efficient during 2005–2007	Other hospitals
Number of hospitals	218	1,991
Share of hospitals	10%	90%
Relative historical performance, 2005–2007		
Risk adjusted:		
Composite 30-day mortality, 2005–2007 (AHRQ)	81%	104%
Readmission rates, 2005–2007	95	100
Standardized cost per discharge, 2005–2007	91	102
Relative mortality metrics, 2008		
Risk adjusted:		
Composite 30-day mortality (AHRQ)	81	103
30-day AMI mortality (CMS)	95	101
30-day CHF mortality (CMS)	95	102
30-day pneumonia mortality (CMS)	95	102
Relative readmission metrics, 2008		
Risk adjusted:		
Composite 30-day readmission (3M)	95	103
30-day AMI readmissions (CMS)	98	100
30-day CHF readmissions	95	100
30-day pneumonia readmissions (CMS)	99	100
Relative percent of patients highly satisfied (H-CAHPS®), 2008	102%	100%
Relative standardized Medicare costs per discharge, 2008	91%	102%
Median Medicare margin, 2008	0.2%	–8.3%

Note: AHRQ (Agency for Healthcare Research and Quality), AMI (acute myocardial infarction), CHF (congestive heart failure), H-CAHPS® (Hospital Consumer Assessment of Healthcare Providers and Systems). Hospitals were put in the relatively efficient group based on their performance on a set of risk-adjusted cost and quality metrics for 2005–2007. Relatives are the median for the group as a percentage of the median of all hospitals. Per case costs are standardized for area wage rates, case mix, severity, prevalence of outlier and transfer cases, interest expense, low-income shares, and teaching intensity. Composite mortality was computed using AHRQ methodology to compute risk-adjusted mortality for six conditions (AMI, CHF, pneumonia, gastrointestinal hemorrhage, stroke, hip fracture). The scores were then weighted for each type of discharge by the share of discharges in that particular hospital. We removed hospitals with low Medicaid patient loads (the bottom 10 percent of hospitals) and hospitals in markets with high service use (top 10 percent of hospitals) due to concerns that socioeconomic conditions and aggressive treatment patterns can influence unit costs and outcomes. The differences in scores between the two groups are all statistically significant using a p=0.01 criterion.

Source: MedPAC analysis of impact file, Medicare Provider Analysis and Review, and Medicare cost report data from CMS, and CMS hospital compare data.

Historically strong performers continue to have lower cost in 2008 Hospitals that were low-cost and low-mortality providers from 2005 through 2007 continued to have lower costs in 2008. The median standardized Medicare cost per discharge in the efficient group was 91 percent of the national median, while the median for the comparison group was 102 percent of the national median. Because of their lower costs, the efficient hospitals have median

Medicare margins of 0.2 percent, more than 8 percentage points higher than the control group.

Continuing improvement in methods used to identify efficient providers Our current measures of hospital costs and outcomes focus on inpatient care. Some hospitals in our set could be efficiently delivering inpatient care but may not be efficiently running their outpatient clinics. This

possibility is a limitation of the current analysis. Because we expect to see continual improvement in risk-adjustment methodologies, the measures we use to identify “efficient” providers will evolve and may eventually include outpatient metrics. We may also break down our analysis to focus more narrowly on the lowest cost providers that can generate high-quality outcomes.

How should Medicare payments change in 2011?

Each year, we provide update recommendations for services covered by Medicare’s inpatient operating and outpatient systems.¹⁶ This recommendation applies only to inpatient and outpatient services; updates for hospital-owned rehabilitation, home health, and skilled nursing units are based on separate recommendations for those types of Medicare services. For both the acute IPPS and OPPOS, the update in current law for fiscal year 2011 is the forecast increase in the hospital market basket index.

CMS measures price inflation for the goods and services hospitals use in producing inpatient and outpatient services with the hospital operating market basket index. CMS’s latest forecast of the change in this index for fiscal year 2011 is 2.4 percent, but it will update the forecast twice before using it to revise payments in 2011.

Update recommendation

This section presents our update recommendation covering acute inpatient operating and outpatient payments, along with a summary of our rationale and the implications of the recommendation. The Commission makes recommendations regarding the level of payment rates and often makes recommendations on how payments should be distributed. In recent years, the Commission has made recommendations not only to increase payment rates but also to create financial incentives for higher quality care. This year, our update recommendation is as follows:

RECOMMENDATION 2A-1

The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2011 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

RATIONALE 2A-1

Most of the Commission’s indicators of payment adequacy are positive. Access to care remains strong, as indicated by more hospitals opening than closing as well as by the rising share of hospitals offering many services. Volume of outpatient services is growing, and quality of care is mixed but generally improving. On the other hand, Medicare margins are low and are expected to remain negative through 2010. However, our analysis of high-performing hospitals finds that a set of hospitals has been able to maintain relatively low costs, while maintaining relatively high quality of care. Roughly half of these providers are generating a profit on their Medicare business.

Balancing these considerations, we conclude that an update equal to the projected increase in the market basket index is appropriate for both inpatient and outpatient services, with this increase implemented concurrently with a quality incentive payment program.¹⁷ Under such a program, for example, if 1 percent of Medicare payments were withheld to fund quality bonuses, a hospital with poor quality metrics would expect a 1.4 percent increase in payments (2.4 – 1.0, without a quality bonus). Hospitals that perform well on quality metrics would receive more than a 2.4 percent increase in payments. The Commission’s reasoning is that an individual hospital’s quality performance should determine whether its net increase in payments is above or below the market basket increase.

The update recommendation does not factor in further adjustments to the payment rates that may be needed to offset unwarranted increases in payments due to improvements in coding as we discuss in Recommendation 2A-2.

IMPLICATIONS 2A-1

Spending

- This recommendation would have no effect on federal baseline program spending.

Beneficiary and provider

- This recommendation should have no negative impact on beneficiary access to care and is not expected to affect providers’ willingness and ability to provide care to Medicare beneficiaries. There is a potential for improved quality of care for beneficiaries.

To ensure that the level of aggregate payments to hospitals for inpatient services is appropriate in 2011 and

later years, we are making our update recommendation in concert with a recommendation to correct for the effects on Medicare payments of hospitals' DCI. As expected, implementation of MS-DRGs in 2008 gave hospitals a financial incentive to improve medical record documentation and diagnosis coding to more fully account for each patient's severity of illness. Documentation and coding improvements strengthen measurement of patient severity and improve payment accuracy among patients, but they also increase reported case mix under MS-DRGs without a real increase in patient severity or the resources hospitals must use to furnish inpatient care. To ensure that the transition to MS-DRGs is budget neutral as required by law, an offsetting adjustment must be made to the Medicare inpatient base payment amounts. With the following recommendation, we propose to spread this budget neutrality adjustment out over several years—longer than is expected under current law—to provide a transition that is manageable for hospitals.

RECOMMENDATION 2A-2

To restore budget neutrality, the Congress should require the Secretary to fully offset increases in inpatient payments due to hospitals' documentation and coding improvements. To accomplish this goal, the Secretary must reduce payment rates in the inpatient prospective payment system by the same percentage (not to exceed 2 percentage points) each year in 2011, 2012, and 2013. The lower rates would remain in place until overpayments are fully recovered.

RATIONALE 2A-2

Before introduction of the MS-DRGs, CMS and the Commission predicted that hospitals would improve their medical record documentation and coding. CMS actuaries projected that hospitals would complete DCI by the end of fiscal year 2009 and the cumulative increase in measured inpatient case mix and payments would reach 4.8 percent. To preserve budget neutrality as required by law, CMS proposed to reduce the inpatient base payment rates by 4.8 percent—1.2 percent in 2008 and 1.8 percent each year in 2009 and 2010. In the TMA, the Congress limited these adjustments to 0.6 percent in 2008 and 0.9 percent in 2009, a total of 1.5 percent. The Congress also provided, however, that if actual data showed that 1.5 percent was too much or too little, CMS would be required to make up or recover the difference, with interest, in 2010, 2011, and 2012. CMS also would have to further adjust the inpatient base payment rates to prevent under- or overpayments from continuing.

CMS's and the Commission's separate analyses of hospitals' 2008 inpatient claims showed that hospitals' DCI led to significant increases in hospital payments in 2008. We do not know precisely how much DCI occurred in 2009 because claims data for that year are not available. In its final rule for fiscal year 2010, CMS decided not to make any adjustment in 2010 to prevent further overpayments or recover overpayments that occurred in 2008. Thus, under current law, CMS is required to make two adjustments to the inpatient base payment rates by 2012. One adjustment would reduce the base payment rates in the IPPS to prevent further overpayments from continuing. The second adjustment would temporarily reduce the base payment rates in 2011 or 2012, or both, to recover the overpayments that occurred in 2008 and 2009, with interest. If the CMS actuaries' estimate of 4.8 percent DCI is on target and CMS decides to split the recovery of overpayments equally over 2011 and 2012, then achieving budget neutrality in 2011 will result in two problems. First, to fully offset the effect of DCI in 2011, CMS would need to implement a 5.9 percent reduction in payments, which is likely to be financially disruptive to many hospitals.¹⁸ Second, even this large reduction in payments would not be sufficient to fully restore budget neutrality because overpayments are continuing in 2010 and these overpayments would not be recovered by the budget-neutrality adjustments required in current law.

The objectives of Recommendation 2A-2 are to:

- treat providers and taxpayers fairly by making the transition to MS-DRGs fully budget neutral, and
- avoid the large financial shock that would occur if the necessary adjustments were made in a single year.

Therefore, under Recommendation 2A-2, the adjustments that are needed to restore budget neutrality are made in increments over a period of three years with a maximum adjustment of 2 percent per year. These adjustments would stay in effect until all overpayments and related interest charges are fully recovered. The key differences from current law are that the size of payment reductions in 2011 are expected to be smaller, the pace of recoveries would be slower, and 2010 overpayments would be recovered.

Assuming the actuaries' 4.8 percent projection of DCI is on target, further overpayments would be prevented by 2012 and all overpayments—including continuing overpayments in 2011 and 2012—would be fully recovered in 2015. If the actual effect of hospitals' DCI in 2009 turns out to be smaller or larger than the actuaries'

projection, the Secretary would have the flexibility to change the level of the annual adjustments—subject to the 2 percentage point upper limit—or the length of time the adjustments remain in place to achieve budget neutrality.

IMPLICATIONS 2A-2

Spending

- Increases spending by more than \$2 billion over one year, and reduces spending by \$1 to \$5 billion over 5 years.

Beneficiary and providers

- No major implications for beneficiaries; improves stability of payments for providers. ■

Endnotes

- 1 CAH conversions have slowed to fewer than 10 per year because of legislation that required new CAHs to be at least 35 miles by primary road or 15 miles by secondary road from another hospital. This requirement does not affect CAHs that converted before 2006. Roughly 10 hospitals convert to long-term care hospitals (LTCHs) each year because of administrative requirements. LTCHs are required to show that they have an average length of stay of at least 25 days before they can be certified as an LTCH. Many LTCHs first become acute care IPPS hospitals until they can demonstrate that they meet the 25-day average stay requirement. Therefore, some of the openings of new hospitals and conversions to LTCHs represent hospitals that never intended to remain an IPPS facility. Once a hospital becomes an LTCH, it is paid based on the separate LTCH payment system.
- 2 The share of hospitals and their affiliates providing each service was calculated as the percentage of hospitals indicating availability of the services within the hospital, network, system, or joint venture.
- 3 Outpatient service volume is measured by using Healthcare Common Procedure Coding System (HCPCS) codes. HCPCS definitions can change over time, which can have some effect on annual changes in volume.
- 4 In the fiscal year 2008 OPPS final rule, CMS amended the definition of observation bed days (which are paid for under the OPPS), effectively loosening the definition of these services for hospitals. This policy change was implemented on January 1, 2008. In addition, some reports allege that physicians are using observation days more often because of concern about audits of medical necessity for some admissions. Hospital volume data suggest that the 2008 policy change (possibly coupled with concerns about audits of admissions) may explain the growth in the number of observation bed days observed in 2008.
- 5 The Commission's analysis of Thomson Financial's monthly tax-free municipal bond issuance data from 2000 through the first 9 months of 2009.
- 6 The Commission's analysis of the Census Bureau's annual hospital construction spending data from 2000 through May 2009.
- 7 A margin is calculated as the difference between Medicare payments and Medicare costs divided by payments. The services included in the overall margin are Medicare acute inpatient, outpatient, graduate medical education, Medicare SNF (including swing beds), Medicare home health care, Medicare inpatient psychiatric, and Medicare inpatient rehabilitation.
- 8 Our forecast is for 2010 using 2010 policies. In prior years, we made projections using the update and costs from year t and payment policies from year $t + 1$. However, it is currently too difficult to project 2011 payment policies given uncertainty on how CMS will handle DCI and implementation of health information technology payments.
- 9 Each SCH will be paid based on the rate that results in the greatest aggregate payment using either the federal rate or the highest of its updated hospital-specific rates from FY 1982, FY 1987, FY 1996, or FY 2006. The FY 2006 hospital-specific rate is likely to be the highest amount for most SCHs.
- 10 The American Recovery and Reinvestment Act of 2009 mandates that HIT payments also be made to hospitals through the Medicaid program.
- 11 The most recent cost data available at the time of this analysis were for the nine months ending September 30, 2009, from certain for-profit systems that report quarterly results. We compared 2007, 2008, and 2009 costs for Hospital Corporation of America, Community Health Systems, Lifepoint, Health Management Associates, Tenet, and Universal Health Services.
- 12 The Dartmouth Center for the Evaluative Clinical Sciences is developing standardized annual overall Medicare spending for the patients assigned to each general acute care hospital in the United States (Fisher and Gottlieb 2008). The data set is promising and allows the Commission to examine whether patients assigned to a particular hospital's medical staff have a low annualized cost of care. However, the risk-adjusted version of these data is still being refined and was not available at the time of this analysis.
- 13 Medicare spending varies in part because of the factors Medicare uses to account for differing wages, payment rates, and health status. We adjust for those factors to arrive at service use. A discussion of our methods to compute regional variation in service use is available at: http://www.medpac.gov/documents/Dec09_RegionalVariation_report.pdf.
- 14 Risk-adjusted mortality is computed for each of the six conditions by using a risk-adjustment methodology developed by AHRQ. The risk-adjusted mortality is then normalized by dividing each hospital's level of risk-adjusted mortality by the national level of risk-adjusted mortality for that condition. Finally, we create a weighted average risk-adjusted mortality for each hospital by weighting the risk-adjusted mortality rates for the six conditions based on their relative share of cases seen in that hospital.

- 15 For example, assume one hospital was unlucky in 2007 and had high risk-adjusted mortality due to patient characteristics that were not in the risk adjuster. This odd, one time patient mix would bias the mortality for this hospital up and force it into the comparison group (i.e., not the “efficient” group). The comparison group would then have its 2007 mortality biased upward and would look poor compared with the “efficient” group. In other words, we do not want errors in categorizing hospitals as efficient to be correlated with errors in their reported cost or quality metrics.
- 16 Our recommendations are with respect to operating payments. The Secretary of Health and Human Services separately evaluates updates to capital payments.
- 17 The inpatient update would apply to fiscal year 2011, and the outpatient update would apply to calendar year 2011.
- 18 While CMS has discussed the possibility of stretching adjustments to offset DCI over several years, the law appears to require that changes in classifications and weightings (e.g., the shift to MS-DRGs) be budget neutral. To obtain budget neutrality in 2011 under current law, payment rates would have to be permanently adjusted down by 3.3 percent if the actuaries’ assumption of 4.8 percent DCI is accurate. If payment reductions to fully offset DCI were stretched out over time, CMS would have to collect remaining 2011 overpayments and interest to fully restore budget neutrality.

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2B

SECTION

Physician services

R E C O M M E N D A T I O N S

2B The Congress should update payments for physician services in 2011 by 1.0 percent.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 1 • ABSENT 1

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(For additional recommendations on a fee schedule adjustment for primary care, see text box on pp. 88–89.)

2B

SECTION

Physician services

Section summary

Physician services include office visits, surgical procedures, and a broad range of other diagnostic and therapeutic services furnished in all settings. In 2008, fee-for-service (FFS) Medicare spent about \$61 billion on physician services, accounting for 13 percent of total Medicare spending. Among the 950,000 providers registered to bill Medicare for physician services, approximately 570,000 are physicians who are actively billing Medicare. The remainder—who accounted for approximately 10 percent of Medicare’s 2008 fee schedule spending—includes other health professionals such as chiropractors, nurse practitioners, and physical therapists. Almost all FFS Medicare beneficiaries (97 percent) received at least one physician service in 2008.

Assessment of payment adequacy

Our analysis of payment adequacy for physician services in Medicare FFS finds that most indicators (discussed below) are positive and stable, suggesting that most beneficiaries can obtain physician care on a timely basis. Therefore, the Commission recommends that Medicare’s payment for physician services be increased by 1.0 percent in 2011.

Beneficiaries’ access to care—Overall, beneficiary access to physician services is good and better than that reported by privately insured patients age 50 to 64. For 2009, most beneficiaries reported that they could get timely physician appointments. Among the small share of beneficiaries looking for

In this section

- Are Medicare payments adequate?
- How should Medicare payments change in 2011?
- Accuracy and equity of payment for physician services

a new physician, most could find one without major problems; however, finding a primary care physician was more difficult than finding a specialist. As in past surveys, racial and ethnic minorities in both the Medicare and privately insured populations were more likely to experience access problems.

While access is good on a national level, beneficiaries in certain market areas may be experiencing more access problems due to factors unrelated to Medicare payment rates, such as relatively rapid population growth. Although a small share of beneficiaries report major problems finding a primary care physician, the issue is a serious concern not only to the beneficiaries but also to the functioning of our health care delivery system. The Commission has made recommendations in previous reports to promote primary care services through targeted payment increases and the testing of medical home models of care.

Other indicators of access include supply of providers serving Medicare beneficiaries and changes over time in the volume of services provided.

- ***Supply of providers***—A 2008 survey conducted by the Center for Studying Health System Change found that most physicians (74 percent) accepted all or most new Medicare patients in their practice (Boukus et al. 2009). Acceptance rates for privately insured patients were higher. Physicians in our focus groups stated that acceptance of privately insured patients varies by specific health plan.
- ***Volume of services***—Service volume per beneficiary continued to grow in 2008. Overall volume (reflecting both service units and intensity) grew 3.6 percent per beneficiary. This rate was higher than the 2007 rate of 2.9 percent. Growth varied among broad categories of services, but all were positive.

Quality of care—Most claims-based indicators for ambulatory quality that we examined for the elderly improved slightly or were stable from 2006 to 2008.

Medicare payments and providers' costs—Medicare's payment for physician services in 2008 averaged 78 percent of private insurer payments. This percentage marks a generally stable ratio over the last decade.

Accuracy and equity of payment for physician services

The Commission has consistently raised concerns about mispricing of services in the physician fee schedule and the inequity of a payment system that financially rewards specialties that can generate volume and revenue more readily than others. In this chapter, we discuss plans for future work on these issues. ■

Background

Physician services include office visits, surgical procedures, and a broad range of other diagnostic and therapeutic services. They are furnished in all settings, including physician offices, hospitals, ambulatory surgical centers, skilled nursing facilities, other post-acute care settings, hospices, outpatient dialysis facilities, clinical laboratories, and beneficiaries' homes. Among the 950,000 providers registered to bill Medicare for physician services, approximately 570,000 are physicians who are actively billing Medicare.¹ The remainder—who accounted for approximately 10 percent of Medicare's 2008 fee schedule spending—includes limited licensed practitioners and other health professionals such as chiropractors, nurse practitioners, and physical therapists.

Physician services are billed to Medicare Part B. Medicare fee-for-service (FFS) payments for physician services totaled \$61 billion in 2008, accounting for about 13 percent of Medicare's overall spending (Boards of Trustees 2009). In the decade 1999 through 2008, Medicare spending per beneficiary on physician fee schedule services grew 72 percent. Almost all FFS Medicare beneficiaries (97 percent) received at least one physician service in 2008.

In the FFS program, Medicare pays for physician services according to a fee schedule that lists services and their associated payment rates. The fee schedule assigns each service a set of three relative weights (physician work, practice expense, and professional liability insurance) intended to reflect the typical resources needed to provide the service. These weights are adjusted for geographic differences in practice costs and multiplied by a dollar amount—the conversion factor—to determine payment amounts. In general, Medicare updates payments for physician services by increasing or decreasing the conversion factor. For further information, see MedPAC's *Payment basics: Physician services payment system*.²

By law, the update of the physician fee schedule conversion factor is determined by a formula—the sustainable growth rate (SGR)—set forth in the Balanced Budget Act of 1997. It ties payment updates to four factors: changes in input costs, changes in Medicare FFS enrollment, changes in the volume of physician services relative to growth in the national economy, and changes in law and regulation. Although the SGR formula has yielded negative updates in recent years, the Congress has

overridden the formula and taken a series of legislative actions to prevent payment reductions since 2003. The SGR formula continues to call for negative updates for several upcoming years, stemming from avoided cuts on top of continued volume growth.

The Commission is not satisfied with the current physician payment update mechanism. The existing SGR formula does not provide incentives for individual physicians to control volume growth, and it is inequitable across physicians. In previous reports, the Commission has examined several alternative approaches for updating physician payments and made suggestions for improving the accuracy of Medicare's payments, creating incentives for physicians to provide better quality of care, coordinating care across settings, and using resources judiciously (Medicare Payment Advisory Commission 2007a).

Are Medicare payments adequate?

Our analysis of payments for physician services in FFS Medicare shows that, in the aggregate, payments through 2009 are adequate. Our assessment examines several indicators: beneficiary access to physician care, including rates of physicians participating with Medicare and taking assignment and changes in the volume of services provided; quality of care; and Medicare reimbursement levels compared with those in the private sector. In the most recent years for which we have data, each indicator was positive or stable with respect to payment adequacy. Unlike our payment adequacy assessments of other providers, such as hospitals, we cannot look at financial performance of physicians directly because they are not required to report their costs to Medicare.

Beneficiaries' access to care: Generally good with relatively few problems reported

Physicians are often the most important link between Medicare beneficiaries and the health care delivery system. Our analysis of the 2007 Medicare Current Beneficiary Survey shows that about 85 percent of noninstitutionalized beneficiaries report that a doctor's office or clinic is their usual source of care. Beneficiary access to physicians, therefore, is an important indicator to monitor when assessing Medicare's payment adequacy. Our analysis of access to physician services focused on indicators from several sources, including patient surveys, physician

surveys, beneficiary focus groups, physician focus groups, and claims data.

The Commission's 2009 patient survey shows that, overall, access is good, but primary care continues to be a concern

To obtain the most current access measures possible, the Commission sponsors a telephone survey each year of a nationally representative, random sample of two groups of people: Medicare beneficiaries age 65 or older and privately insured individuals age 50 to 64. For our 2009 survey (conducted from August through October), we increased the sample size to 4,000 in each group (totaling 8,000 completed interviews including an oversample of minority respondents) to increase statistical power.³ By surveying both groups of people—privately insured individuals and Medicare beneficiaries—we can assess the extent to which access problems, such as delays in scheduling an appointment or difficulty in finding a new physician, are unique to the Medicare population.⁴

Results from our 2009 survey indicate that most beneficiaries have reliable access to physician services, with most reporting few or no access problems. Most beneficiaries are able to schedule timely medical appointments and find a new physician when needed, but some beneficiaries experience problems, particularly for primary care. Moreover, Medicare beneficiaries reported similar or better access than privately insured individuals age 50 to 64.

On a national level, this survey does not find widespread physician access problems, but certain market areas may be experiencing more access problems due to factors unrelated to Medicare—or even private—payment rates, such as relatively rapid population growth. Moreover, although a relatively small share of beneficiaries report major problems finding a primary care physician, this issue is a serious concern not only to the beneficiaries but also to the functioning of our health care delivery system. Media attention on this matter is understandable. The Commission has made recommendations in previous reports to promote primary care services through targeted payment increases and the testing of medical home models of care.

Most beneficiaries are getting timely appointments

Most Medicare beneficiaries have one or more doctor appointments in a given year. Therefore, one access indicator we examine is their ability to schedule timely

appointments. In the 2009 survey, most Medicare beneficiaries (77 percent) and most privately insured individuals age 50 to 64 (71 percent) reported “never” having to wait longer than they wanted to get an appointment for routine care (Table 2B-1). Another 17 percent of Medicare beneficiaries reported that they “sometimes” had to wait longer than they wanted for a routine appointment, compared with 22 percent of privately insured individuals. The differences between the Medicare and privately insured populations in their “never” and “sometimes” response rates were statistically significant, suggesting that, on average, Medicare beneficiaries were more satisfied with the timeliness of their routine care appointments.

As expected, rates of getting timely illness- and injury-related appointments were better than rates for routine care appointments. Again, Medicare beneficiaries were less likely than privately insured individuals to report problems getting timely illness or injury appointments. Among those who had an appointment for an illness or injury, 85 percent of Medicare beneficiaries and 79 percent of privately insured individuals said they “never” experienced a delay, while 11 percent of Medicare beneficiaries reported “sometimes” having to wait longer than they wanted, compared with 17 percent of privately insured individuals. These differences are statistically significant, suggesting that, on average, Medicare beneficiaries were less likely than privately insured individuals to encounter delays for illness and injury appointments.

Beneficiaries’ appointment access in 2009 varied by race, with minorities more likely than whites to report access problems (Table 2B-2, p. 74). This difference was seen for both the Medicare and the privately insured populations. For example, white Medicare beneficiaries (78 percent) were significantly more likely than minority beneficiaries (72 percent) to report never waiting longer than they wanted for routine care appointments. Among the privately insured population, whites (72 percent) were significantly more likely than minority individuals (67 percent) to report never waiting longer than they wanted for routine care appointments. The trend was similar for illness and injury appointments. Within our sample, access problems were more frequent for minorities with private insurance than for those with Medicare, but few of these differences were statistically significant. Finding disparities in access between whites and minorities is consistent with recent research conducted by the Center for Studying Health System Change (HSC). On the basis of a national

**TABLE
2B-1****Trends in access to physicians for Medicare beneficiaries age 65 or older and privately insured persons age 50 to 64 remain stable across years, 2009**

Survey question	Medicare (age 65 or older)				Private insurance (age 50-64)			
	2006	2007	2008	2009	2006	2007	2008	2009
Unwanted delay in getting an appointment:								
Among those who needed an appointment, "How often did you have to wait longer than you wanted to get a doctor's appointment?"								
For routine care								
Never	75%*	75%*	76%*	77%*	69%*	67%*	69%*	71%*
Sometimes	18*	18*	17*	17*	21*	24*	24*	22*
Usually	3*	3	3*	2*	5*	4	5*	3*
Always	3	3	2	2	4	3	2	3
For illness or injury								
Never	84*	82*	84*	85*	79*	76*	79*	79*
Sometimes	11*	13*	12*	11*	15*	17*	16*	17*
Usually	2	3	1	2	2	3	2	2
Always	1*	2	1*	1	2*	3	2*	2
Looking for a new physician: "In the past 12 months, have you tried to get a new primary care doctor?"								
Yes	10	9	6	6	10	10	7	8
No	89	91	93	93	90	90	93	92
Getting a new physician: Among those who tried to get an appointment with a new physician, "How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it..."								
Primary care physician								
No problem	76	70*	71	78	75	82*	72	71
Small problem	10	12	10	10	15	7	13	8
Big problem	14	17	18	12*	10	10	13	21*
Specialist								
No problem	80	85	88	88	83	79	83	84
Small problem	7	6	7	7	9	11	9	9
Big problem	11	9	4	5	7	10	7	7
Not accessing a doctor for medical problems:								
"During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?" (Percent answering "Yes")								
	8*	10*	8*	7*	11*	12*	12*	11*

Note: Numbers may not sum to 100 percent due to rounding. Missing responses ("Don't Know" or "Refused") are not presented. Overall sample sizes for each group (Medicare and privately insured) were 2,000 in years 2006 and 2007, 3,000 in 2008, and 4,000 in 2009. Sample sizes for individual questions varied.

*Indicates a statistically significant difference between the Medicare and privately insured samples in the given year at a 95 percent confidence level.

Source: MedPAC-sponsored telephone surveys, conducted August–September 2006, 2007, 2008, and 2009.

**TABLE
2B-2**

Access to physician care is similar or better for Medicare beneficiaries compared with privately insured individuals, but minorities in both groups report problems more frequently, 2009

Survey question	Medicare (age 65 or older)			Private insurance (age 50-64)		
	All	White	Minority	All	White	Minority
Unwanted delay in getting an appointment:						
Among those who needed an appointment, "How often did you have to wait longer than you wanted to get a doctor's appointment?"						
For routine care						
Never	77%*	78%*†	72%*†	71%*	72%*†	67%*†
Sometimes	17*	17*	18*	22*	22*	23*
Usually	2*	2	2	3*	3	4
Always	2	2†	4†	3	2†	5†
For illness or injury						
Never	85*	86*†	81*†	79*	80*†	75*†
Sometimes	11*	11*	11*	17*	17*	19*
Usually	2	1†	3†	2	2	2
Always	1	1†	2†	2	1†	3†
Looking for a new physician: "In the past 12 months, have you tried to get a new primary care doctor?"						
Yes	6	6*	8	8	8*	8
No	93	94	92	92	92	92
Getting a new physician: Among those who tried to get an appointment with a new physician, "How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it..."						
Primary care physician						
No problem	78	82*	69	71	70*	69
Small problem	10	7	17	8	8	11
Big problem	12*	11*	12	21*	22*	19
Specialist						
No problem	88	91†	75†	84	86†	73†
Small problem	7	5†	13†	9	9	11
Big problem	5	4†	11†	7	5†	16†
Not accessing a doctor for medical problems:						
"During the past 12 months, did you have any health problem or condition about which you think you should have seen a doctor or other medical person, but did not?" (Percent answering "Yes")						
	7*	6*†	9*†	11*	10*†	13*†

Note: Numbers may not sum to 100 percent due to rounding. Missing responses ("Don't Know" or "Refused") are not presented. Overall sample size for each group (Medicare and privately insured) is 4,000. Sample sizes for individual questions varied.

*Indicates a statistically significant difference between the Medicare and privately insured samples in the given year at a 95 percent confidence level.

†Indicates a statistically significant difference by race within the same insurance coverage category in the given year at a 95 percent confidence level.

Source: MedPAC-sponsored telephone surveys, conducted August–September 2006, 2007, 2008, and 2009.

physician survey, the authors found that physicians with a higher share of minorities in their practice were more likely to report difficulties obtaining referrals to specialists for their patients (Reschovsky and O'Malley 2008). Physicians attributed such problems to the fact that many of their patients were uninsured or had insurance coverage that posed access barriers rather than to an inadequate supply of qualified specialists in the area.

Relatively few Medicare and privately insured patients sought a new physician, but of those who did, some experienced access problems

Our survey also monitors the two sample groups' need and ability to find a new physician. As in previous years, relatively few survey respondents reported that they tried to get a new primary care physician or specialist in 2009. This finding suggests that most respondents were either satisfied with their current physician or did not have a health event that made them search for a new one. Specifically, 6 percent of Medicare beneficiaries and 8 percent of privately insured individuals reported that they looked for a new primary care physician in the preceding year; a higher percentage (14 percent of Medicare beneficiaries and 19 percent of privately insured individuals) reported seeking a new specialist (not shown in table).

We found that, across income categories, Medicare beneficiaries appear equally likely to be looking for a new primary care physician (not shown in table). In contrast, among the privately insured population (age 50–64) those with lower incomes were more likely to report looking for a new primary care physician during the year. This situation may reflect more frequent job changes among lower income, privately insured individuals that lead to changes in insurance and applicable physician networks.

Of the 6 percent of Medicare beneficiaries who looked for a new primary care physician in 2009, 22 percent reported problems finding one—10 percent characterized the problem as “small” and 12 percent reported it as “big.” Though reports of “big” problems in our sample have declined slightly, the 2009 rates are not significantly different from those found in our 2008 survey. Although the number of beneficiaries reporting any problem corresponds to less than 2 percent of the total Medicare population (22 percent of the 6 percent of beneficiaries looking for a new primary care physician), the problems these beneficiaries face can be distressing and are often featured in local and national media reports. It is also

important to note that such media accounts typically report similar problems for privately insured individuals. For 2009, among patients looking for a primary care physician, Medicare beneficiaries were less likely to report a “big problem” than privately insured individuals.

Because several recent media reports have misstated the numbers that we present in this annual chapter, we want to emphasize that the percentage of beneficiaries and privately insured people reporting problems comes from a subset of those who indicate that they were, in fact, looking for a new physician or tried to get an appointment in the last year. Survey respondents who did not look for a new physician or did not try to get a physician appointment were not asked about related problems. Thus, the rates of patients reporting problems refer only to those people to whom the question applies and not to the Medicare or privately insured population at large. Accordingly, as stated earlier, among the 6 percent of Medicare beneficiaries reporting that they looked for a new primary care physician in the preceding year, those reporting that they experienced either “big” or “small” problems correspond to less than 2 percent of the total Medicare population.

As in previous years, we found that beneficiaries seeking a new specialist were less likely to report problems than those seeking a new primary care physician. Among those looking for a new specialist, 88 percent of Medicare beneficiaries reported “no problem” finding one in 2009, compared with 84 percent of privately insured individuals. Also, the rate of those with a “big problem” finding a specialist was lower (but neither is statistically significant) for Medicare beneficiaries than for privately insured individuals. More Medicare beneficiaries and privately insured individuals reported seeking a new specialist than a new primary care physician. These 2009 results are consistent with the findings in the 2008 and 2007 surveys (Table 2B-1, p. 73).

Our survey reveals some differences between minorities and whites in reported ease of finding a new physician (Table 2B-2). Among Medicare beneficiaries, we found a statistically significant difference in the share of whites (4 percent) and minorities (11 percent) who reported “big problems” finding a specialist. This finding mirrored the responses of privately insured individuals (Table 2B-2). Differences between whites and minorities in reported ease of finding a new primary care physician were not statistically significant in the Medicare population.

More specific analysis by race and ethnicity shows few significant differences between white and African American Medicare beneficiaries or between white and African American individuals with private insurance. However, our survey does suggest that Hispanics and other minorities (American Indians, Alaskan Natives, Asian Americans, and Hawaiian and Pacific Islanders) were more likely than whites to report access problems (data not shown).

Reports of not getting needed physician care were more frequent for privately insured and lower income individuals

Our survey also examines rates of patients reporting that they did not see a physician when they thought they should have. In 2009, Medicare beneficiaries (7 percent) were less likely than their privately insured counterparts (11 percent) to say that they should have seen a doctor for a medical problem in the past year but did not (Table 2B-1, p. 73). For those people who reported not getting care, fewer than 20 percent listed physician availability issues (e.g., getting an appointment time or finding a doctor) as the problem (not shown in table). The other reasons they gave included cost, low perceived seriousness of the problem at the time of the illness, and procrastination.

Race and income are related to reports of not getting needed care. Among Medicare beneficiaries, minorities (9 percent) were significantly more likely than whites (6 percent) to report not getting physician care when they thought they should have. Similarly, privately insured minorities (13 percent) were significantly more likely than privately insured whites (10 percent) to report not getting physician care when they thought they should have (Table 2B-2, p. 74). We also found that, for both Medicare and privately insured people, those with lower incomes were more likely to report that they did not see a physician when they thought they should have (not shown in table). This finding is consistent with much published research (Strunk and Cunningham 2002). Considering the recent downturn in the U.S. economy, concerns about out-of-pocket spending for health care are likely to increase.

Market area issues

While on a national level, our telephone survey does not find widespread physician access problems, certain market areas may be experiencing more access problems due to factors unrelated to Medicare—or even private—payment rates, such as relatively rapid population growth. In examining this market-area access issue, HSC compared

physician access by geographic area, with particular attention to the difference between Medicare and private insurer fees in each area (Trude and Ginsburg 2005). This research found that, despite differences in Medicare and commercial payment rates across markets, the proportion of Medicare beneficiaries reporting problems with access to care did not vary based on differences in Medicare and private payer rates. In addition, privately insured people age 55 to 64 did not appear to gain better access to care relative to Medicare beneficiaries in markets with higher commercial payment rates. These findings suggest that developments in local health systems and markets may strongly influence access for both Medicare beneficiaries and the privately insured. Indeed, these conditions may affect beneficiary access as much as or more than Medicare payment levels.

Although our survey is not large enough to allow us to examine access by specific market areas, we are able to examine access by rural and urban areas. Within the Medicare sample, we found no statistical differences between rural and urban beneficiaries in their ability to get timely appointments and find new physicians. However, among the privately insured sample, we did find statistical differences in their ability to find new physicians. For example, rural privately insured individuals were more likely to report a “big problem” finding a specialist than urban privately insured individuals (see online Appendix A to this chapter, available at <http://www.medpac.gov>). Additionally, we found that rural Medicare beneficiaries had the same or better access than rural privately insured individuals.

This year, we also explored market-area access through beneficiary and physician focus groups in three areas (discussed later in this chapter). Although we found some variation, in all three areas, most physicians were accepting Medicare beneficiaries and beneficiary reports of access problems were uncommon.

Other national patient surveys show comparable results

Results from other patient surveys (conducted or sponsored by CMS, The Commonwealth Fund, HSC, and AARP) are analogous to the Commission’s survey results on access to physician services. We summarize findings from these studies below.

The Consumer Assessment of Healthcare Providers and Systems for Medicare FFS (CAHPS®–FFS) is a large CMS-sponsored survey that asks assorted questions

related to the health care services FFS beneficiaries receive. In 2008, its most recent round, 87 percent of Medicare beneficiaries reported “always” or “usually” being able to schedule timely appointments for routine care. Also, 91 percent of beneficiaries reported that they “always” or “usually” were able to schedule an appointment with a specialist as soon as they wanted. The share of beneficiaries reporting major problems accessing physicians for routine and specialty care has remained below 6 percent since 2001. Although, generally speaking, patients with poorer health status were more likely to report problems, beneficiaries age 85 or older were least likely to report big problems. Considering the importance of tracking access to primary care specifically, the Commission suggests that CMS consider asking specifically about beneficiary access to primary care providers on the CAHPS–FFS survey, including primary care physicians, nurse practitioners, and physician assistants.

In a 2007 patient survey, the Commonwealth Fund found that, compared with people who have private insurance, Medicare beneficiaries age 65 or older reported fewer problems obtaining medical care, less financial hardship due to medical bills, and higher overall satisfaction with their health care (Davis et al. 2009). Among elderly Medicare beneficiaries, 10 percent said that their physician did not take their insurance, compared with 17 percent of those with employer coverage and 24 percent of those with individually purchased insurance. About 20 percent of elderly Medicare beneficiaries reported access problems for health care due to costs compared with 37 percent of people with employer-sponsored health insurance. Regarding perceived quality of care, 61 percent of elderly Medicare beneficiaries said that they received “excellent or very good” care, compared with 49 percent of those covered by employer-based plans and 48 percent of those with individually purchased insurance.⁵

HSC also reported household survey results on access to health care by type of insurance for 2007. Over the last decade, HSC has conducted three large household surveys funded by the Robert Wood Johnson Foundation. For 2007, HSC found that Medicare beneficiaries were significantly less likely to report delaying or not getting needed medical care than people with employer-sponsored private insurance and nongroup private insurance (Cunningham 2008). Although Medicare beneficiaries fared best, this survey found that access has generally worsened for all insurance types over the last decade.⁶ In

earlier work, HSC also examined patient-reported waiting times for appointments. From 1997 to 2003, they found that waiting times, in days, increased for both Medicare beneficiaries and privately insured individuals age 55 to 64. This finding held true for primary care and specialist appointments, but the research has not been updated since 2003. Although waiting times rose from 1997 to 2003, complaints about delaying care did not rise at the same pace, suggesting that patients may now expect longer waits for physician appointments (Trude and Ginsburg 2005).

AARP also conducted a patient survey in 2007, which found that Medicare respondents were less likely to encounter problems accessing physicians than privately insured people age 50 to 64 (Keenan 2007). For example, 68 percent of Medicare beneficiaries reported that they “never” had to wait longer than they expected for routine care, compared with 60 percent of privately insured respondents. The AARP survey also asked about patients’ satisfaction with access to physicians. Among Medicare beneficiaries, 82 percent reported that they were “extremely satisfied” or “very satisfied” compared with 78 percent of privately insured individuals. Although this survey’s sample size is smaller than both the Commission’s and HSC’s surveys, its results are consistent with the larger surveys.

Using a variety of methods, the Government Accountability Office also concluded that Medicare beneficiaries have stable access to physician services (Government Accountability Office 2009b). This study found that Medicare beneficiaries experienced few problems accessing physician services during a 2007–2008 study period. Furthermore, the proportion of beneficiaries who received physician services and the number of services per beneficiary served increased nationwide from 2000 to 2008.

Physician surveys show that most physicians accept Medicare patients

We also measure beneficiary access to physicians through information obtained in physician surveys, such as those conducted by HSC, the Commission, and the National Center for Health Statistics. For the most part, these surveys explore physicians’ willingness to accept new patients by various insurance types, finding that most physicians are willing to accept some or all Medicare patients.

HSC’s mail survey of physicians in 2008 found that most physicians are accepting all or most new Medicare and

privately insured patients in their practice (Boukus et al. 2009). Specifically, 74 percent of physicians reported that their practices accepted all or most new Medicare patients, and 87 percent reported accepting all or most new privately insured patients. (These percentages include practices with potentially low shares of Medicare patients, such as pediatrics.) Physicians' acceptance of new Medicaid patients was lower (53 percent) than for Medicare and privately insured patients. African American physicians were more likely than white physicians to accept new Medicaid patients. Physicians in rural areas were more likely than those in urban areas to accept new patients of all insurance types.

Boukus and colleagues also found that newer physicians were more likely to accept new Medicare patients than physicians who had been in practice longer. Additionally, employee physicians (compared with full or part owners) and physicians who are part of a group practice (compared with solo or two-physician practices) were more likely to accept all new Medicare patients. Physicians who classified themselves in surgical or medical specialties were more likely to accept all new Medicare and privately insured patients compared with the remaining internal medicine physicians—most, if not all, of whom practice primary care. Considering that the share of physicians selecting careers in office-based primary care is declining, this differential in access between primary care and specialty care is likely to widen for both Medicare and privately insured patients (Bodenheimer 2006).

The National Ambulatory Medical Care Survey (NAMCS)—a national survey of office-based physicians—also shows that over the last several years a large majority of physicians continue to accept some or all new Medicare patients. For 2007, among physicians with at least 10 percent of their practice revenue coming from Medicare, 92 percent accepted at least some new Medicare patients (Cherry 2009). By specialty, 88 percent of primary care physicians and about 94 percent of physicians in all other specialties accepted at least some new Medicare patients.⁷

The Commission's 2006 survey of physicians also asked about acceptance of new patients by insurance type (Medicare Payment Advisory Commission 2007b). Separating Medicare FFS from Medicare Advantage, and differentiating between HMO and non-HMO private insurance, we found that 80 percent of physicians accepted all or most new Medicare FFS patients; 86 percent of physicians accepted all or most new private, non-HMO

patients; 65 percent of physicians accepted all or most new HMO patients; and 47 percent accepted all or most new Medicaid patients.

A different type of study—focused more on claims-processing indicators—also compares Medicare with private insurers. Conducted by the American Medical Association (AMA), the 2009 National Health Insurer Report Card shows that Medicare performed similar to or better than private insurers on several claims-processing measures, such as indicators for timeliness, transparency, and accuracy of claims processing (American Medical Association 2009). The report card noted that, although Medicare had higher rates of denied claims (4 percent) than several of the private insurers, Medicare does not require preauthorization for services, as do many private insurers.

Focus groups of beneficiaries and physicians report no major access problems

In addition to analysis of nationally based indicators of access to physician services, we also conducted focus groups with beneficiaries and physicians to gain further insight into access issues in different areas of the country. For this work, we conducted a series of 18 focus groups in three areas (Baltimore, Chicago, and Seattle). Participants totaled 99 Medicare beneficiaries and 64 physicians. Although focus groups are not designed to be nationally or even regionally representative, Medicare participants were recruited to include a range of participants representing different income level, race and ethnicity, and health status. Our physician focus groups also included a range of physicians from different practice sizes (from solo to large group practices), specialties, race and ethnicity, and patient populations. Overall, we found that access to physician services does not appear to be a major problem in any of these three locations, but one or more participants in each location reported some difficulties. Most physicians said that they were accepting new Medicare patients, but a few were not.

Beneficiary focus groups For the most part, beneficiaries in our focus groups stated that they had long-established relationships with a particular doctor or practice and have not recently needed to search for a new doctor. Most beneficiaries reported that they did not have to wait an unreasonable amount of time to get an appointment with their doctors, especially their primary care doctor. Several reported that, although they heard about primary care doctors not accepting new Medicare patients, they did not

experience a problem. Lower income beneficiaries in the focus groups appeared more likely than higher income individuals to encounter access problems.

Because the incidence of needing and looking for a specialist (for new health problems) is higher than that for primary care physicians, problems finding specialists and getting appointments with them were more frequently reported in our focus groups, compared with primary care physicians—with whom beneficiaries had long-standing relationships. (Recall that our annual telephone survey shows that only 6 percent of Medicare beneficiaries report needing to find a primary care physician (Table 2B-1, p. 73).) A few beneficiaries reported that, compared with their previous experiences in private insurance, they preferred having Medicare because the coverage seemed to work more smoothly. In more than one market area, however, beneficiaries under age 65 reported feeling that doctors questioned the extent of their disability and thus their Medicare eligibility.

Physician focus groups In the physician focus groups, we asked physicians about their willingness to accept new Medicare patients and their ability to get referrals for their patients. Although almost all the physicians in our focus groups were accepting new Medicare patients, a few were not. Most complained that Medicare's payment rates are low relative to private insurer payment rates. Some physicians reported that their offices limited the number of new Medicare patients that they accept each year. Some specialists emphasized the importance of maintaining Medicare revenue and accepting Medicare referrals in their practice. Some physicians in our focus groups indicated that they did not accept Medicare Advantage plans but did accept patients with traditional Medicare. Other physicians—even in the same city—reported that they had the opposite policy. Some physicians reported that they did not accept certain private insurance plans because of low payment rates and inability to negotiate higher rates. Medicaid was, by far, the least accepted insurance source among the physicians.

Psychiatry was the most frequently listed specialty for which physicians reported having difficulty finding referrals for their Medicare patients. Researchers have attributed this access problem primarily to Medicare's considerably higher beneficiary cost-sharing liability for outpatient psychiatric services, relative to other Part B services (Abrams and Young 2006, Slade et al. 2005). Psychiatrists may be unable to collect the full cost-sharing portion from patients or from Medicaid in some states. On

this issue, the Congress recently lowered beneficiary cost sharing for outpatient psychiatric services to become equal to that of most other Part B services by 2014 as described in the text box on page 80. Note, however, that this policy change does not affect Medicare's allowed fee schedule rate for these services. Some observers may also attribute access problems to Medicare's allowed fee schedule payment rate for these services. Further research on Medicare's fee schedule valuation of these services may be helpful. Also, other research has found that psychiatrists are much less likely to accept new patients, regardless of insurance type, than other physicians (Boukus et al. 2009).

There was considerable agreement among physicians in our focus groups about their likes and dislikes regarding Medicare. The most frequently cited complaint about Medicare was that its payment rates were lower than private rates. Many physicians stated that Medicare did not compensate them sufficiently for the time they needed to spend with elderly patients with complex medical problems. Several physicians in one area expressed frustration with Medicare's coding issues and the billing system—especially the coding of longer physician visits—and cited anxiety about Medicare audits and reviews.

Almost all physicians reported that they liked the predictability and reliability of Medicare payment. Many also commented that they appreciated Medicare's lack of preapproval requirements, particularly for surgical procedures—allowing physicians to address patients' needs quickly. A third item that many physicians stated regarding their likes about Medicare was its reliable coverage for elderly and disabled patients. One physician said that he was appreciative that he did not have to worry about his elderly patients losing health insurance and not being able to come see him. Others also stated that they enjoyed treating the elderly patient population and found this age group intellectually stimulating.

The topic of “concierge care” was raised by participants in both the beneficiary and physician focus groups. In general, concierge care—also known as retainer-based care—is physician-based care (typically for primary care) in which patients are charged a membership fee in return for enhanced services. This model of care is associated with lower patient caseloads per physician. Many beneficiaries in our focus groups had heard of concierge care but most were not directly affected by it and did not report access problems resulting from it. Two beneficiaries who had recently signed up with concierge physicians reported that, although it was expensive, they liked it.

Payment policy changes for outpatient psychiatric services may improve patient access

The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) phases out the higher cost-sharing liability that had been in place for outpatient psychiatric services since Medicare's inception. Starting in 2010, beneficiary cost sharing drops from 50 percent to 45 percent, then drops again in 2012 to 40 percent, in 2013 to 35 percent, and in 2014 to 20 percent—equal to that of most other Part B Medicare services.

Many experts and researchers have stated that this historic disparity in cost sharing between most other Part B services and outpatient psychiatric services created access problems for Medicare patients. Some mental health professionals may be unwilling to accept Medicare patients who do not have supplemental insurance that fully covers their cost sharing because of the challenges associated with collecting this portion from patients or from Medicaid in some states (Abrams

and Young 2006, Slade et al. 2005). Several physicians in our focus groups (discussed on pp. 78–80 of this chapter) stated that finding psychiatrists for their Medicare patients can be difficult.

The MIPPA provision does not mean that psychiatrists and other eligible mental health professionals will be able to collect higher total amounts for their services as determined by the physician fee schedule. Rather, they will be able to collect larger shares of payments from Medicare and rely less heavily on copayments from patients (some of whom may have been unable to afford the cost sharing) and supplemental insurance (including Medicaid).

Regarding other work related to mental health care, the Commission is currently examining issues related to Medicare's prospective payment system for inpatient psychiatric care. ■

Alternatively, several beneficiaries stated that they would not want to pay the extra fees and would be unhappy if their physicians converted to concierge practices. None of the physicians in our focus groups was in a concierge practice, but one had former experience in one. Many of the physicians expressed concern about this model of care, but a small number of physicians thought it could be useful and compared it with medical home models.

Rates of physician participation and services paid on assignment are high

To supplement our data on the supply of physicians treating Medicare patients and beneficiaries' reported access to physician care, we examine assignment rates (the share of Medicare allowed charges for which physicians accept the assigned fee schedule amount as payment in full) and physician participation rates (the share of physicians and other health professionals with signed Medicare participation agreements who accept the fee schedule amount as payment in full). Our analysis of Medicare claims data shows that 99.5 percent of allowed charges for physician services were assigned in 2008

(Figure 2B-1); that is, for almost all allowed services that year, physicians agreed to accept the Medicare fee schedule amount as payment in full for the service. The assignment rate has held steady at more than 99 percent since 2000.

The high rate of assigned charges reflects the fact that most physicians who bill Medicare do so as participating physicians. For 2009, 95 percent of physicians, limited license practitioners, and nonphysician practitioners who billed Medicare had participation agreements with Medicare. Participating physicians agree to accept assignment on all allowed Medicare claims in exchange for a 5 percent higher payment on allowed charges. Participating physicians also receive nonmonetary benefits, such as being able to receive payments directly from Medicare (less the beneficiary cost-sharing portion) rather than having to collect the total amount from the beneficiary. This arrangement is a major convenience for many physicians. In fact, we note that in AMA's 2009 National Health Insurer Report Card, Medicare performed similar to or better than private insurers on several claims-processing measures, such as indicators for timeliness,

transparency, and accuracy of claims processing (American Medical Association 2009). Participating physicians also have their name and contact information listed on Medicare’s website and they have the ability to electronically verify a patient’s Medicare eligibility and supplemental insurance status. Participation agreements, however, do not require physicians to take Medicare patients.

While 97 percent of allowed charges in 2008 were for services provided by participating physicians, another 2 percent were for services provided by nonparticipating physicians who decided to accept assignment. Only 0.5 percent of allowed charges were for services provided by nonparticipating physicians who did not accept assignment.

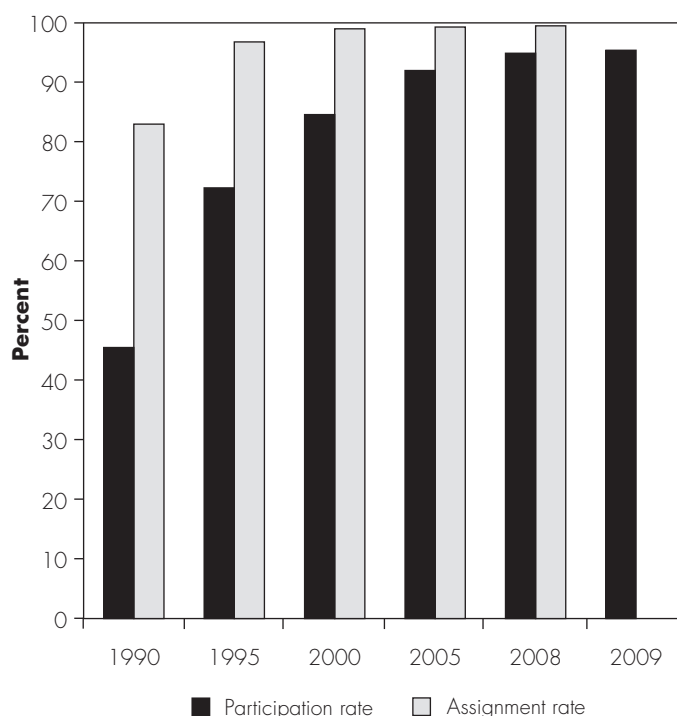
Volume growth does not reveal access problems but highlights sustainability, pricing, and equity concerns

Interpreting increases and decreases in service volume growth as an indicator of payment adequacy is complex. For example, decreases in volume could signify price inadequacy if physicians were reluctant to offer such services based on their Medicare payment. However, our evidence indicates that volume decreases are more likely to be due to other factors, such as general changes in practice patterns. For example, the volume of coronary artery bypass grafting has been declining as other interventions substitute for the procedure. Increases in volume may signal overpricing if physicians favor certain services because they are exceedingly profitable; similarly, other factors—including population changes, disease prevalence, changes in Medicare benefits, shifts in the site of care, technology, and beneficiaries’ preferences—can also explain volume increases. As an example, procedures for injecting pharmacologic agents into the eye have increased in volume in recent years as therapies have emerged for treating macular degeneration. Another confounding factor is that the volume of services sometimes increases when payment rates decline (Codespote et al. 1998). The possibility of such a response—known as a behavioral or volume offset—makes it particularly difficult to interpret volume increases by themselves as an indicator of payment adequacy.

Volume growth gives rise to other concerns expressed by the Commission and others about the future of Medicare. These concerns include the fiscal sustainability of the Medicare program, the inequity of a payment system that

FIGURE 2B-1

Participation and assignment rates have grown to high levels, 1990–2009



Note: Participation rate is the percentage of physicians and other professionals with signed Medicare participation agreements. Assignment rate is the percentage of Medicare allowed charges for which physicians and other health professionals accept the assigned fee schedule amount as payment in full. The assignment rate for 2009 is not shown; it requires calculations from claims not yet available.

Source: Ways and Means Greenbook (2004), unpublished CMS data, and MedPAC analysis of Medicare claims for a 5 percent random sample of Medicare beneficiaries.

allows some physicians to generate volume and revenue more readily than others, and the mispricing of services in the physician fee schedule. We discuss these issues later in the chapter.

In 2008, the volume of physician services used per Medicare beneficiary continued to grow. For this analysis, we used claims data for 2003 through 2008 and calculated per beneficiary growth in the units of service furnished by physicians and other professionals billing under Medicare’s physician fee schedule. We then weighted the units of service by each service’s relative value units (RVUs) from the physician fee schedule. The result is a measure of growth that accounts for changes in both the number of services and the complexity, or intensity,

of those services. We thus distinguish growth in volume from growth in units of service: volume growth includes changes in intensity, whereas unit-of-service growth does not. Compared with analyzing growth in spending, measuring growth in volume removes the effects of price changes.

Across all services, volume per beneficiary grew 3.6 percent in 2008 (Table 2B-3). For each broad category of service—evaluation and management (E&M), imaging, major procedures, other procedures (nonmajor), and tests—growth rates varied but were all positive. Services in the “tests” category grew the most: from 2007 to 2008, they increased 4.5 percent. Growth rates for other categories were 4.3 percent for other procedures, 3.5 percent for E&M, 3.3 percent for imaging, and 2.7 percent for major procedures.

In contrast to volume growth for the broad service categories, some of the subcategories of services saw decreases. The volume decrease in coronary artery bypass grafts continues a trend in recent years and likely represents substitution of less invasive services for this procedure. The volume decrease in colonoscopy is more difficult to interpret. We note that Medicare beneficiaries use different types of services for screening, diagnosis, and treatment of diseases of the colon. We will monitor these services for signs of changes in utilization. In the case of the two categories of MRI studies—MRI of the brain and MRI of other parts of the body, we make two observations about the decreases in the volume of these services. First, for both categories, the number of services per beneficiary increased. Second, the intensity of services decreased—that is, average RVUs per service fell. The decreases in intensity occurred because of shifts in utilization from studies done with contrast material to studies done without contrast material.

Other subcategories saw increases in volume per beneficiary, with some of the increases raising questions about necessity. Imaging services in the “Advanced—computed tomography (CT): other” category are one example. These services grew at an average annual rate of 12.6 percent from 2003 to 2007 and by another 4.6 percent from 2007 to 2008.⁸ This growth has accompanied dramatic increases in CT availability, raising questions about the costs and benefits of the expansion (Baker et al. 2008). Outpatient rehabilitation, under other procedures, is another service that has seen rapid growth in volume. From 2003 to 2007, the volume of these services per

beneficiary grew an average 11.7 percent per year. From 2007 to 2008, growth was another 10.3 percent. Because of concerns about growth in spending for these services, limits—known as “therapy caps”—were established as part of the Balanced Budget Act of 1997.⁹ However, much of the growth in 2008 occurred in services eligible for an exception to the caps.¹⁰ Under major procedures, the “orthopedic—other” category is a third example of services with rapid volume growth. From 2003 to 2007, service volume went up by an average of 7.2 percent and from 2007 to 2008 it went up by 8.1 percent. While this category includes a somewhat heterogeneous mix of services, much of the growth here is in spine surgery, a type of procedure that has prompted questions about effectiveness (Abelson 2008).

Quality of care: Most ambulatory care quality measures remained stable or improved from 2006 to 2008

Our analysis of Medicare claims data shows that ambulatory care quality, by most measures, was stable or showed improvement. Using a set of indicators developed by the Commission, the Medicare Ambulatory Care Indicators for the Elderly (MACIEs), we measured changes over time in the provision of necessary acute and follow-up care to beneficiaries in FFS Medicare with certain acute and chronic-disease diagnoses that are prevalent in the Medicare elderly population, and we measured rates of potentially avoidable hospitalizations for five chronic conditions. Online Appendix B to this chapter describes development of the MACIEs in more detail and online Appendix C to this chapter lists the 38 indicators.

Most quality indicators improved or were stable from 2006 to 2008

Comparing the indicators in 2008 with those in 2006, we find that most remained stable or improved (Table 2B-4, p. 84). Among the 38 MACIE measures, 19 showed statistically significant improvement and 14 showed no statistically significant change. This finding indicates that beneficiaries with the selected conditions were at least as likely (or more likely) in 2008 as in 2006 to receive the clinically indicated services for their condition and, in most cases, avert potentially avoidable hospitalizations related to their condition. Further, we see improvements in the potentially avoidable hospitalization outcome measures for diabetes, coronary artery disease, and congestive heart failure that are correlated with improvements in performance on process measures for the same conditions.

**TABLE
2B-3****Use of physician services per fee-for-service beneficiary continues to increase**

Type of service	Change in units of service per beneficiary		Change in volume per beneficiary		Percent of total volume
	Average annual 2003-2007	2007-2008	Average annual 2003-2007	2007-2008	
All services	3.5%	3.1%	4.9%	3.6%	100.0%
Evaluation and management	1.5	2.2	3.2	3.5	42.5
Office visit—established patient	1.6	1.9	3.0	3.2	18.2
Hospital visit—subsequent	1.3	2.0	2.4	3.2	8.5
Consultation	0.1	1.2	2.5	2.2	5.5
Emergency room visit	1.3	3.0	3.6	5.2	2.9
Nursing home visit	2.6	4.1	9.7	5.3	2.2
Hospital visit—initial	0.4	2.6	0.8	3.0	2.0
Office visit—new patient	1.7	2.4	1.9	2.7	1.7
Imaging	4.6	2.8	8.3	3.3	15.8
Advanced—CT: other	10.3	5.1	12.6	4.6	2.4
Echography—heart	5.8	4.2	6.9	4.6	1.9
Standard—nuclear medicine	4.1	-0.8	6.3	0.5	1.9
Advanced—MRI: other	10.0	1.2	10.6	-0.1	1.8
Standard—musculoskeletal	3.5	0.9	3.4	1.0	1.0
Advanced—MRI: brain	5.5	2.0	5.1	-1.9	0.9
Echography—other	9.8	6.1	10.8	7.1	0.9
Imaging/procedure—other	12.3	6.3	14.6	10.6	0.7
Standard—breast	8.9	5.7	5.2	7.4	0.7
Standard—chest	0.9	2.5	1.3	2.7	0.6
Echography—carotid arteries	5.1	2.6	8.3	4.6	0.6
Advanced—CT: head	6.9	5.1	8.5	4.4	0.6
Major procedures	2.5	0.4	3.1	2.7	8.6
Cardiovascular—other	-0.4	-0.1	1.2	2.1	1.8
Orthopedic—other	6.6	7.6	7.2	8.1	1.2
Knee replacement	6.6	2.3	7.8	2.9	0.7
Coronary artery bypass graft	-7.6	-5.9	-7.7	-6.2	0.5
Coronary angioplasty	-1.0	1.2	-1.1	0.9	0.4
Explore, decompress, or excise disc	5.0	5.1	5.6	5.5	0.4
Hip replacement	2.1	1.9	3.3	2.6	0.4
Hip fracture repair	-0.2	-0.1	1.1	0.8	0.3
Pacemaker insertion	4.4	5.9	3.7	1.8	0.3
Other procedures	6.5	5.7	6.6	4.3	21.3
Skin—minor and ambulatory	3.7	3.6	4.8	3.5	3.7
Outpatient rehabilitation	11.3	9.5	11.7	10.3	2.8
Radiation therapy	3.0	-0.3	8.6	4.7	2.3
Minor—other	17.4	5.1	9.6	7.2	2.2
Cataract removal/lens insertion	1.3	0.1	1.7	0.5	1.5
Minor—musculoskeletal	7.9	4.4	9.5	5.5	1.4
Colonoscopy	2.1	-1.3	1.9	-1.4	1.0
Eye—other	11.3	10.3	7.5	2.3	0.9
Cystoscopy	2.5	0.6	5.4	1.0	0.5
Upper gastrointestinal endoscopy	2.7	1.9	2.7	2.3	0.5
Tests	3.3	2.0	6.2	4.5	5.0
Other tests	4.8	0.7	8.9	4.1	2.2
Electrocardiogram	1.7	1.3	1.7	2.5	0.6
Cardiovascular stress tests	4.9	1.3	5.4	2.7	0.6
Electrocardiogram monitoring	4.7	7.7	3.3	3.6	0.2

Note: CT (computed tomography), MRI (magnetic resonance imaging). Volume is measured as units of service multiplied by each service's relative weight (relative value units) from the physician fee schedule. To put service use in each year on a common scale, we used the relative weights for 2008. For billing codes not used in 2008, we imputed relative weights based on the average change in weights for each type of service. Some low-volume categories and services are not shown but are included in the summary calculations. One such category includes all positron emission tomography services that would otherwise appear in disparate other categories.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.

**TABLE
2B-4****Most ambulatory care quality indicators improved or were stable from 2006 to 2008**

Indicators	Number of indicators			Total
	Improved	Stable	Worsened	
All	19	14	5	38
Anemia	3	1	0	4
CAD	3	1	0	4
Cancer	0	3	4	7
CHF	7	1	0	8
COPD	1	0	1	2
Depression	0	1	0	1
Diabetes	4	3	0	7
Hypertension	0	1	0	1
Stroke	1	3	0	4

Note: CAD (coronary artery disease), CHF (congestive heart failure), COPD (chronic obstructive pulmonary disease).

Source: MedPAC analysis of Medicare Ambulatory Care Indicators for the Elderly (MACIE) from the Medicare 5 percent Standard Analytic Files.

We found a statistically significant decline in 5 of the 38 quality indicators from 2006 and 2008. First, we found a small decline (about 0.5 percentage point) in the breast cancer screening rate (64.8 percent) for female beneficiaries age 65 to 74. This change is consistent with breast cancer screening rates for Medicare managed-care enrollees, which decreased from 69.5 percent in 2006 to 68.0 percent in 2008 (National Committee for Quality Assurance 2009). Second, we found a relatively larger decrease in the rate for follow-up mammography for beneficiaries who had a diagnosis of breast cancer within the preceding 12 months.¹¹ Third, we observed a small (less than 2 percentage points) decrease in the rate of recommended chest X-rays for beneficiaries with an initial diagnosis of breast cancer. Fourth, we identified a small decline in the rate of colonoscopies for beneficiaries with a first-time diagnosis of iron-deficiency anemia (a potential symptom of colon cancer). Last, we found a small increase in the rate of potentially preventable hospitalizations for beneficiaries diagnosed with chronic obstructive pulmonary disease (COPD). COPD can often be controlled in an outpatient setting, so a rise in the hospitalization rate for exacerbations of COPD may reflect a decline in the quality of outpatient care (Agency for Healthcare Research and Quality 2007).

Most measures of potentially avoidable hospitalizations improved or were stable from 2006 to 2008

Six MACIEs measure the occurrence of potentially avoidable hospitalizations or emergency department visits for selected chronic conditions. Three of these measures improved, two remained stable, and one worsened (hospitalizations for beneficiaries with COPD, discussed above). The three measures that significantly improved from 2006 to 2008 were the percentage of beneficiaries diagnosed with unstable angina who had multiple emergency department visits during the year, the percentage of beneficiaries with diabetes who were admitted to a hospital for serious long-term complications of that condition (e.g., lower extremity amputation), and the percentage of beneficiaries with congestive heart failure who had hospitalizations related to heart failure. Inpatient admission rates were stable for beneficiaries with diabetes or with hypertension who were admitted for treatment of serious short-term complications of those conditions.

We found that, for several conditions, the declines in potentially avoidable hospitalizations occurred concurrently with increases in the use of other clinically indicated services for the same condition. For example, for diabetes we found a decrease in the rate of diabetes-related hospitalizations over the same time period that we observed statistically significant increases in the use of diagnostic testing (such as lipid and hemoglobin testing) and follow-up visits for beneficiaries diagnosed with diabetes.

Medicare payments and providers' costs

To assess Medicare payments and providers' costs, we compare Medicare's fee schedule payments to private insurers' payments and examine forecasts for input cost changes. We cannot look at financial performance of physicians directly because physicians are not required to report their costs to Medicare, as are other providers such as hospitals and home health agencies.

Ratio of Medicare to private insurer physician fees has remained relatively stable

Another measure of Medicare payment adequacy examines the trend in Medicare's allowed physician fees (including patient cost sharing) relative to private insurer allowed fees.¹² In the early to mid-1990s, Medicare payment rates averaged about two-thirds of commercial payment rates for physician services, but since 1999

Medicare rates consistently have been near 80 percent of commercial rates. For 2008, Medicare's payments for physician services are at 78 percent of commercial rates when averaged across all physician services and geographic areas (Figure 2B-2). We base this analysis on a data set of paid claims for two large national private insurers.¹³ In a comparison of the two most recent years, the 2008 rate is slightly lower (about 1 percentage point) than it was for 2007. For this year's report, we refined our analysis methodology, which resulted in lower ratios of Medicare to private rates by 1 to 2 percentage points in the years 2004–2008.¹⁴

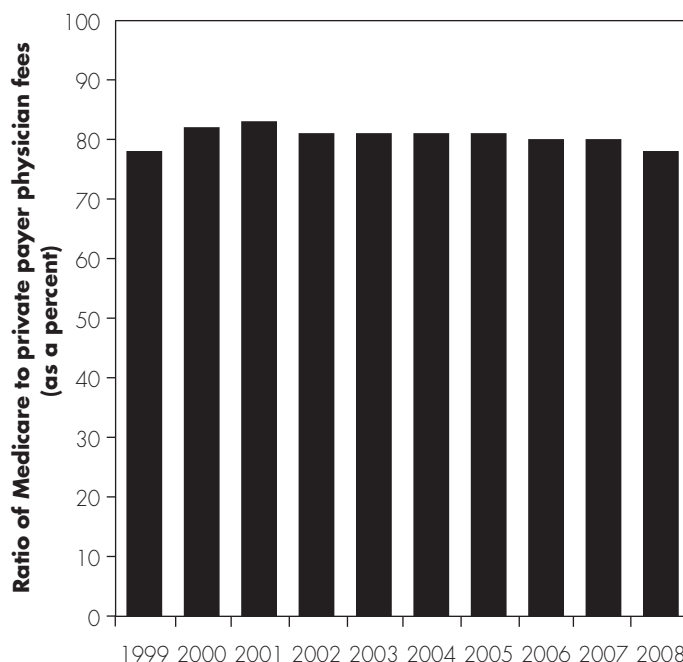
Medicare's payment rates for E&M services are closer to private payers' rates—about 82 percent on average in 2008. We continue to see the effects of decline in Medicare payment rates for the broad category of imaging services due to a provision in the Deficit Reduction Act of 2005 that capped fee schedule imaging rates at rates from the outpatient prospective payment system and changed the calculation of practice expenses. If our Medicare-to-private analysis excluded imaging services, the 2008 ratio would have been about 2 percentage points higher—that is, the overall ratio would be about 80 percent for nonimaging services.

It may also be useful to compare Medicare fees with national preferred provider organization (PPO) rates because most commercially insured individuals (nearly two-thirds) are in PPO arrangements. This comparison may better represent the prevailing commercial rates that physicians face relative to Medicare. Using a subset of the data included in our overall analysis, we calculate that Medicare's rates for physician services average about 80 percent of commercial PPO rates.

In considering how commercial payment rates may affect access for Medicare beneficiaries, we refer to research conducted by HSC, cited earlier in this chapter. This research found that the proportion of Medicare beneficiaries reporting problems with access to care in markets with the widest payment rate gaps did not vary significantly from the proportion reporting problems in markets with more similar payment rates (Trude and Ginsburg 2005). In addition, privately insured individuals age 55 to 64 did not appear to gain better access to care relative to Medicare beneficiaries in markets with higher commercial payment rates. These findings suggest that developments in local health systems and markets may strongly influence access for both Medicare beneficiaries and the privately insured. These conditions may affect

**FIGURE
2B-2**

**Ratio of Medicare to private
payer physician fees is stable**



Note: Due to a refinement in our analysis methodology, results presented here for years 2004–2007 are slightly different from those published in previous MedPAC reports. Fee comparisons are based on allowed charges.

Source: Direct Research, LLC, for MedPAC for 1999–2003 data. MedPAC analysis for 2004–2008 data.

beneficiary access as much as or more than Medicare payment levels.

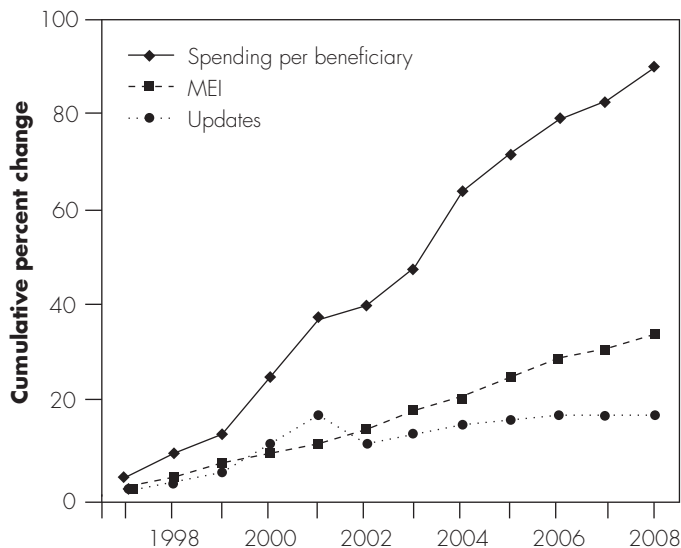
Input costs for physician practices are expected to increase in 2011

For 2011, CMS forecasts that input prices for physician services will increase by 2.1 percent.¹⁵ This forecast does not include an adjustment for expected productivity increases. In contrast, CMS's 2011 forecast of the Medicare Economic Index (MEI)—a measure of changes in input prices for physician services, adjusted for productivity growth in the national economy—is 0.9 percent. For these forecast estimates, CMS collects from various data sets and surveys. Additionally, CMS calculates a weighted average of expected input price changes from survey data collected by the AMA in 2000.

Medicare's total payments to physicians have increased faster than both the MEI and updates to the fee schedule's

**FIGURE
2B-3**

**Volume growth has raised
spending faster than input
prices and the updates**



Note: MEI (Medicare Economic Index).

Source: 2005 and 2009 trustees' reports and data from Office of the Actuary.

conversion factor (Figure 2B-3). Over the first 12 years of the SGR policy (1997–2008), the updates rose 17 percent cumulatively while the MEI rose 34 percent cumulatively. However, examining these two rates ignores volume growth and its effect on physician revenues. Over the same 12-year period, Medicare spending for physician services—per beneficiary—increased by 90 percent. Volume growth accounts for the difference between the updates and spending growth, and physician revenues from this spending growth are a function of volume growth and fee schedule updates.

How should Medicare payments change in 2011?

In consideration of the expected input cost growth described above and our analysis of other payment adequacy indicators, the Commission recommends a modest update for physician services in 2011. We summarize this analysis and recommendation below.

Update recommendation

Our analysis of the most recently available data finds that, overall, Medicare payments for physician services are adequate. Access, supply, quality, and volume measures suggest that most Medicare beneficiaries are able to obtain physician services with few or no problems. Certain market areas, however, may be experiencing more access problems due to factors unrelated to Medicare—or even private—payment rates, such as relatively rapid population growth. Although a relatively small share of beneficiaries report major problems finding a primary care physician, these beneficiaries' experiences are very concerning. The Commission has made recommendations in previous reports to promote primary care services through targeted payment increases and the testing of medical home models of care.

For this report, we recommend that the Congress change current law to update the physician fee schedule conversion factor for 2011 by a moderate amount—1.0 percent. In making this update recommendation, the Commission takes into account three factors that summon the need to maintain cost pressures. First, the Commission strongly promotes the principle that Medicare's payment systems should encourage efficiency in the provision of Medicare services. Competitive markets demand continual efficiency improvements from the workers and firms who pay the taxes used to finance Medicare. Maintaining cost pressure is a key to achieving efficiency improvements. A second consideration that calls for constraint is the impact on beneficiaries' out-of-pocket spending liability. Updates for physician services carry with them increases to beneficiaries' cost-sharing and premium amounts. Third, the Medicare program faces fiscal sustainability problems, which require committed efforts to resolve if Medicare spending growth is to be slowed.

RECOMMENDATION 2B

The Congress should update payments for physician services in 2011 by 1.0 percent.

RATIONALE 2B

Our analysis of the most recently available data finds that, overall, Medicare payments for physician services are adequate. Access, supply, quality, and volume measures suggest that most Medicare beneficiaries are able to obtain physician services with few or no problems. In our 2009 patient survey, Medicare beneficiaries (age 65 or older) were more likely to report better access to physicians than privately insured individuals (age 50 to

64). We recommend that the Congress change current law to update the physician fee schedule conversion factor for 2011 by a moderate amount—1.0 percent. In addition, we reaffirm our previous recommendation to increase payments for primary care services when provided by practitioners who focus their practice on primary care (see text box, pp. 88–89).

IMPLICATIONS 2B

Spending

- Relative to current law, this recommendation is estimated to increase federal program spending by more than \$2 billion in the first year and by more than \$10 billion over five years. Enactment of any positive update for 2011 would substantially increase Medicare spending relative to current law, because current law under the SGR system calls for negative updates from 2010 through at least 2015.

Beneficiary and provider

- Relative to current law, the update recommendation would increase Part B premiums and coinsurance liability amounts. Payment increases for physician services would maintain provider willingness to serve Medicare patients and thus beneficiary access to their services.

Accuracy and equity of payment for physician services

The Commission has consistently raised concerns about mispricing of services in the physician fee schedule and the inequity of a payment system that allows some physicians to generate volume and revenue more readily than others. These issues have strong implications for the sustainability of Medicare and—over the long run—the mix of physicians serving Medicare beneficiaries.

- **Mispricing.** In previous work, the Commission made recommendations on improving the process through which CMS reviews the fee schedule's relative values for accuracy (Medicare Payment Advisory Commission 2006). Since then, CMS and the AMA Specialty Society Relative Value Scale Update Committee have improved the review process. However, there are still reasons for CMS to adopt our recommendations. For example, many procedures have never been reexamined to determine whether the average time and intensity of effort necessary to

perform them has decreased as a result of advances in technology, technique, and other factors. When such efficiency gains are achieved, the work value for the affected services should decline accordingly, and—through application of budget-neutrality requirements—the values for all other services would increase (assuming all else equal). But because of the problems with the review process, categories of services without new procedures—such as primary care—become undervalued over time and thus risk being underprovided. The converse—that overvalued services may be overprovided—is also a concern.

- **Equity.** The physician fee schedule—a FFS payment system—creates two mechanisms for payment inequity among physicians. First, it rewards physicians who increase the volume of services they provide regardless of the services' benefits, with the potential—under the SGR system—for across-the-board reductions in fees for all services and all physicians. Second, the fee schedule establishes considerable differences in physician compensation. That is, for a given amount of a physician's time, differences in payment raise questions about whether they are consistent with the difficulty of furnishing the service. Furthermore, the Commission has raised questions about whether the basis and process for valuing physician services needs to be revised.

For future work, the Commission—while not determining RVUs—will continue to address these issues. As an example, we will consider the validity of estimates of the typical amount of time a physician spends furnishing the services billable under the physician fee schedule. These time estimates explain much of the variation in the fee schedule's payments for physician work. However, questions about the estimates have been raised in research for CMS and the Assistant Secretary for Planning and Evaluation (Cromwell et al. 2006, Cromwell et al. 2007, McCall et al. 2006). In addition, the Government Accountability Office found that the fee schedule does not adequately account for efficiencies occurring when a physician furnishes multiple services for the same patient on the same day (Government Accountability Office 2009a). The Commission will investigate the availability of data—or approaches to collecting data—that could substitute for the time estimates. Further, we will explore whether expanding the unit of payment through packaging or bundling would improve payment accuracy and encourage more efficient use of services. ■

Previous Commission recommendation on a fee schedule adjustment for primary care

In 2008 and again in 2009, the Commission recommended a fee schedule adjustment to promote primary care. Through budget-neutral payment increases for primary care services, the recommendation redistributes fee schedule payments toward selected services furnished by primary care physicians and other health professionals who focus their practice on providing primary care, such as advanced practice nurses and physician assistants.

This recommended fee schedule adjustment would signal a major change in the purpose of the physician fee schedule. Currently, the fee schedule is intended only to account for differences in resource costs among services. Using the fee schedule as a vehicle for promoting primary care would be a very different role for the payment system. Instead of solely accounting for services' individual resource costs, a payment system that included an adjustment for primary care would place greater value on the services needed to achieve a reformed delivery system. Following is the recommendation made in the Commission's June 2008 and March 2009 reports:

The Congress should establish a budget-neutral payment adjustment for primary care services billed under the physician fee schedule and furnished by primary-care-focused practitioners. Primary-care-focused practitioners are those whose specialty designation is defined as primary care and/or those whose pattern of claims meets a minimum threshold of furnishing primary care services. The Secretary would use rulemaking to establish criteria for determining a primary-care-focused practitioner.

A fee schedule adjustment for primary care would help overcome the undervaluation of primary care services and help ensure beneficiaries' access to primary care services and practitioners. Because primary care is essential for a well-functioning health care delivery system, the Commission considers it important to increase its value in Medicare. If commercial insurers, Medicaid programs, and other payers use Medicare's physician fee schedule as a basis for their payment rates, the fee schedule adjustment could promote primary care throughout the health care system. In addition, the fee schedule adjustment would complement other recent, budget-neutral policy changes implemented through regulation:

(continued next page)

Previous Commission recommendation on a fee schedule adjustment for primary care (cont.)

- For 2007, CMS's five-year review—a review of the fee schedule's relative values for physician work—resulted in payment increases for most primary care services.
- Also for 2007, CMS changed its method for determining the relative value of a fee's practice expense component and started a four-year transition to the new values. This methodologic refinement—intended to improve payment accuracy—resulted in increased practice expense values for some types of services, including primary care.
- For 2010, CMS no longer recognizes the billing codes for consultation services. To make the change budget neutral, the agency has allocated the work relative values for consultations to some primary care services—office visits and initial nursing facility visits—and to initial hospital visits.
- For 2010, CMS has started a four-year transition to practice expense relative values that incorporate data from the Physician Practice Information Survey and that account for an increase in the utilization rate for

expensive diagnostic equipment.¹⁶ These changes have decreased practice expense relative values for some services and increased them for other services, including primary care services.

When fully implemented, the 2007 and 2010 policy changes could have an important effect on payments. Two caveats deserve consideration, however. First, the increases are limited in how much they would redistribute payments compared with the fee schedule adjustment the Commission recommends. They apply to the primary care services billed by all physicians, not just the primary care services furnished by practitioners who have focused their practices on primary care. Second, if the regulatory changes are altered, their effects could diminish. Comparing payment rates in 2006 with payment rates in 2010, the rates for primary care services would rise by 17.7 percent. The increases in 2010 are a large proportion of that total. The change in payment for consultations accounts for 3.1 percentage points of the increase. The practice expense changes account for 2.8 percentage points of the increase. ■

Endnotes

- 1 Physicians and other providers may be registered with Medicare but not actively billing Medicare. A Commission analysis of claims for 2006 shows that approximately 570,000 physicians billed Medicare. More recent data on the number of physicians billing Medicare are unavailable because of problems stemming from conversion to new provider identifier numbers, which occurred in 2007 to comply with the Health Insurance Portability and Accountability Act.
- 2 See http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_Physician.pdf.
- 3 The 2009 survey included an oversample of African Americans, Hispanics, and other minorities—including American Indians, Alaskan Natives, Asian Americans, and Hawaiian and Pacific Islanders. All respondents had the opportunity to take the survey in English or Spanish.
- 4 Within that population, our survey results do not distinguish Medicare FFS enrollees from those in Medicare Advantage (MA) plans because of the technical difficulty in obtaining reliable self-identification of FFS or MA enrollment from surveyed individuals. Similarly, we do not distinguish by type of private coverage among the non-Medicare population in our survey.
- 5 Although the sample size of Commonwealth’s survey makes it difficult to draw definitive conclusions about Medicare beneficiaries under the age of 65, results showed that these disabled beneficiaries reported access problems more frequently than elderly Medicare beneficiaries and privately insured individuals. Further study on access issues for disabled Medicare beneficiaries is needed to understand the circumstances driving these results, which are consistent with previous research findings (Briesacher et al. 2002).
- 6 Exact comparisons between HSC’s surveys and the Commission’s surveys are difficult because of differences in questions and respondent ages. For example, HSC’s survey includes people of all ages, whereas the Commission’s survey is limited to people age 50 or older. Also, the HSC survey does not specifically ask about access to physician care; instead, it focuses on access to medical care more generally.
- 7 For these analyses, we excluded certain types of specialties that do not typically serve most Medicare beneficiaries, such as all pediatric specialties, obstetrics, and medical genetics. Physicians with specialties of anesthesiology, radiology, and pathology are excluded by the NAMCS sampling frame, which focuses on office-based physicians.
- 8 The 2008 growth rate for these services includes—but is not limited to—rapid growth in CT-guided radiation therapy.
- 9 A more detailed description of the therapy caps can be found at www.medpac.gov/documents/MedPAC_Payment_Basics_09_OPT.pdf.
- 10 Some growth in the volume of outpatient therapy may be due to enforcement of a compliance threshold for inpatient rehabilitation facilities known as the “60 percent rule” (Medicare Payment Advisory Commission 2009).
- 11 Medicare coding requirements changed for mammography claims between 2006 and 2007. This change may have played a role in the decline we detected in our data analysis.
- 12 Although allowed amounts include patient cost-sharing liabilities, they do not include balancing billing amounts that would exceed the fee schedule amounts.
- 13 Our analysis relies on data from two national insurers, but—like all insurers—they face different market conditions in different areas. In a particular area, for example, there may be one dominant insurer that is better able to negotiate lower prices with providers, while other insurers have to pay higher rates. Although the data we use for our analysis from the two national insurers have a wide and diverse geographic distribution, we may not be able to fully capture the variation in private payment rates in different areas that results from local competitive circumstances.
- 14 The method used for the comparison involves calculating a price index for the different types of private plans present in the data that are the basis of our analysis—HMO, point of service, preferred provider organization (PPO), and indemnity. Each price index is a weighted average of service-level price comparisons between Medicare and private payment rates, using Medicare’s volume in each service as the weight. The plan-specific estimates are then weighted based on the Kaiser Family Foundation and Health Research and Educational Trust yearly estimates of private enrollment in each type of plan for 2008 (Kaiser Family Foundation and Health Research and Educational Trust 2009). To address enrollment in high-deductible health plans (HDHPs), we classified them as PPOs for enrollment distribution and payment rate purposes, because health plan industry sources indicate that 90 percent of HDHP enrollees are offered these options off a PPO “platform.”
- 15 This input cost forecast includes an estimated 2.2 percent increase in physician compensation (physicians’ wages and benefits) and a 2.0 percent increase in practice expense costs. CMS updates these forecasts quarterly. We used the forecasts dated October 16, 2009.
- 16 In 2010, CMS will also conclude the four-year transition to the new method for calculating practice expense.

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2C

SECTION

Ambulatory surgical centers

R E C O M M E N D A T I O N

- 2C** The Congress should implement a 0.6 percent increase in payment rates for ambulatory surgical center services in calendar year 2011 concurrent with requiring ambulatory surgical centers to submit cost and quality data.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

Ambulatory surgical centers

Section summary

Ambulatory surgical centers (ASCs) furnish outpatient surgical services to patients not requiring hospitalization and for whom an overnight stay is not expected after surgery. In 2008,

- ASCs served 3.3 million Medicare beneficiaries, an increase of 2.8 percent over 2007,
- the number of Medicare-certified ASCs was 5,175, an increase of 3.7 percent over 2007, and
- Medicare combined program and beneficiary spending on ASC services was \$3.1 billion, an increase of 9.7 percent per fee-for-service (FFS) beneficiary over 2007.

Assessment of payment adequacy

Most of the available indicators of payment adequacy for ASC services, discussed below, are positive. The Commission therefore recommends a modest 0.6 percent increase to the payment rates for ASC services in calendar year 2011, concurrent with requiring ASCs to submit cost and quality data.

Beneficiaries' access to care—Our analysis of facility supply and volume of services provided indicates that beneficiaries' access to ASC care has generally been adequate.

In this section

- Are Medicare payments adequate in 2010?
- How should Medicare payments change in 2011?
- Revisiting the ASC market basket

- **Capacity and supply of providers**—From 2003 through 2007, the number of Medicare-certified ASCs grew by an average annual rate of 6.7 percent; in 2008, this rate slowed to 3.7 percent. The slower growth in 2008 may reflect the downturn in the U.S. economy. Also, the ASC payment system underwent a substantial revision in 2008, which may have caused investors to delay opening new ASCs to see how payment system changes would affect the overall ASC market.
- **Volume of services**—From 2003 through 2007, the volume of services per FFS beneficiary grew by 10.2 percent; in 2008, volume growth rose slightly to 10.5 percent. From 2003 through 2008, the number of beneficiaries served in ASCs increased by an average of 5.7 percent per year.

Quality of care—Because CMS does not require ASCs to submit quality data, we are unable to assess ASCs’ quality of care.

Providers’ access to capital—ASCs’ access to capital appears to be adequate as the number of ASCs has continued to increase.

Medicare payments and providers’ costs—From 2003 through 2008, ASCs’ Medicare revenue increased from \$2.2 billion to \$3.1 billion. Also, from 2003 through 2007, Medicare payments per FFS beneficiary increased at an annual rate of 8.0 percent and in 2008 by 9.7 percent.

Revisiting the ASC market basket

The projected change in providers’ input prices is an important part of the Commission’s annual update process. Because of concerns that the market basket index CMS uses to update ASC payments (the consumer price index for all urban consumers) may not reflect ASCs’ cost structure, we examined whether an alternative price index—such as those used for hospitals and physician practices—would better measure changes in ASC costs. We used ASC cost data from a Government Accountability Office survey to compare the distribution of ASC costs with the distribution of hospital and physician practice costs. Although the ASC cost data are not sufficient for comparing each category of costs across settings, they suggest that ASCs have a different cost structure from hospitals and physician offices. ASCs appear to have a much larger share of expenses related to medical supplies and drugs than the other two settings, a much smaller share of labor costs than hospitals, and a smaller share of all other costs than physician offices. Given these marked differences, the Congress should require ASCs to submit cost data to CMS, which should decide whether to use an existing Medicare price index as a proxy for ASC costs or develop an ASC-specific price index. ■

Background

An ambulatory surgical center (ASC) is a distinct entity that furnishes outpatient surgical procedures to patients who do not require an overnight stay following the procedure. Almost all ASCs are freestanding facilities rather than part of a larger facility such as a hospital. Beneficiaries may also receive surgical services in inpatient and outpatient hospital settings and sometimes in physician offices.

ASCs are a source of revenue for many physicians; about 90 percent of ASCs have at least one physician owner. In addition, about 20 percent of ASCs with physician ownership are physician–hospital joint ventures (Ambulatory Surgery Center Association 2008).

Since 1982, Medicare has made payments for surgical procedures provided in ASCs. Physicians who perform procedures in ASCs or in other facilities receive separate payments for their professional services.

To receive payments from Medicare, ASCs must meet Medicare’s conditions of coverage for ASCs, which specify minimum standards for: administration of anesthesia, quality evaluation, operating and recovery rooms, medical staff, nursing services, and other areas.

Medicare pays for a bundle of facility services provided by ASCs, such as nursing, recovery care, anesthetics, and supplies. This payment system underwent substantial revisions in 2008 (see online Appendix A to this chapter, available at <http://www.medpac.gov>). The most significant changes included a substantial increase in the number of surgical procedures covered under the ASC payment system, allowing ASCs to bill separately for certain ancillary services, and large changes in payment rates for many procedures. To help ASCs adjust to the changes in payment rates, CMS is phasing in the new payment rates over four years, from 2008 through 2011.

Medicare covers about 3,400 surgical procedures under the ASC payment system. The relative weight for most covered surgical procedures is based on its relative weight under the outpatient prospective payment system (PPS)—the system Medicare uses to set payments for most services furnished in hospital outpatient departments (HOPDs).¹ This linkage to the outpatient PPS is consistent with a previous Commission recommendation to align the relative weights in the outpatient PPS with the ASC payment system (Medicare Payment Advisory Commission 2004). For most covered surgical procedures, the payment rate is

the product of its relative weight and a conversion factor set at \$41.87 in 2010. However, the conversion factor in the outpatient PPS for 2010 is \$67.41. The reason for the difference in conversion factors is that CMS sets the ASC conversion factor so that total payments equal what the program spent on ASC services in 2007, the year before CMS implemented the revised ASC payment system. In contrast, CMS sets the outpatient PPS conversion factor so that total payments in that system equal what the program spent on hospital outpatient services in the year before CMS implemented the outpatient PPS. Note that CMS updates both the ASC and outpatient PPS conversion factors over time to reflect inflation.

An important exception to this linkage to the outpatient PPS is the procedures that are performed predominantly in physician offices and that were first covered under the ASC payment system in 2008 or later. Payment for these “office-based” procedures is the lesser of the amount derived from the outpatient PPS relative weights or the nonfacility practice expense amount indicated on the Medicare physician fee schedule (MPFS). CMS set this limit on the rate for office-based procedures to prevent migration of these services from physician offices to ASCs for financial reasons. Because CMS updates payment rates in the outpatient PPS and the MPFS independently of each other, it is possible for the ASC payment rate for an office-based procedure to be based on the outpatient PPS rate in one year and on the MPFS rate the next year (or vice versa).

The ASC payment system generally parallels the outpatient PPS in terms of which ancillary services are paid separately and which are packaged into the payment of the associated surgical procedure. Starting in 2008, ASCs receive separate payment for these ancillary services:

- radiology services that are integral to a covered surgical procedure if separate payment is made for the radiology service in the outpatient PPS,
- brachytherapy sources implanted during a surgical procedure,
- all pass-through and non-pass-through drugs that are paid separately under the outpatient PPS when provided as part of a covered surgical procedure, and
- devices with pass-through status under the outpatient PPS.

The Commission’s Payment Basics series provides more information about the ASC payment system (available at

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments

There is significant evidence that ambulatory surgical centers (ASCs) treat different types of patients than hospital outpatient departments (HOPDs). ASCs are less likely to serve medically complex patients, Medicaid patients, African Americans, and Medicare beneficiaries who are older or eligible for Medicare because of disability.

Research by the Commission showed that ASCs treat Medicare patients who are less medically complex than patients treated in HOPDs, as measured by differences in average risk scores (Medicare Payment Advisory Commission 2003).² Under a contract with the Commission, RAND Health compared the characteristics of Medicare beneficiaries who had cataract surgery or a colonoscopy in an ASC in 2001 with beneficiaries who received these procedures in an HOPD. RAND found that ASC patients were less likely

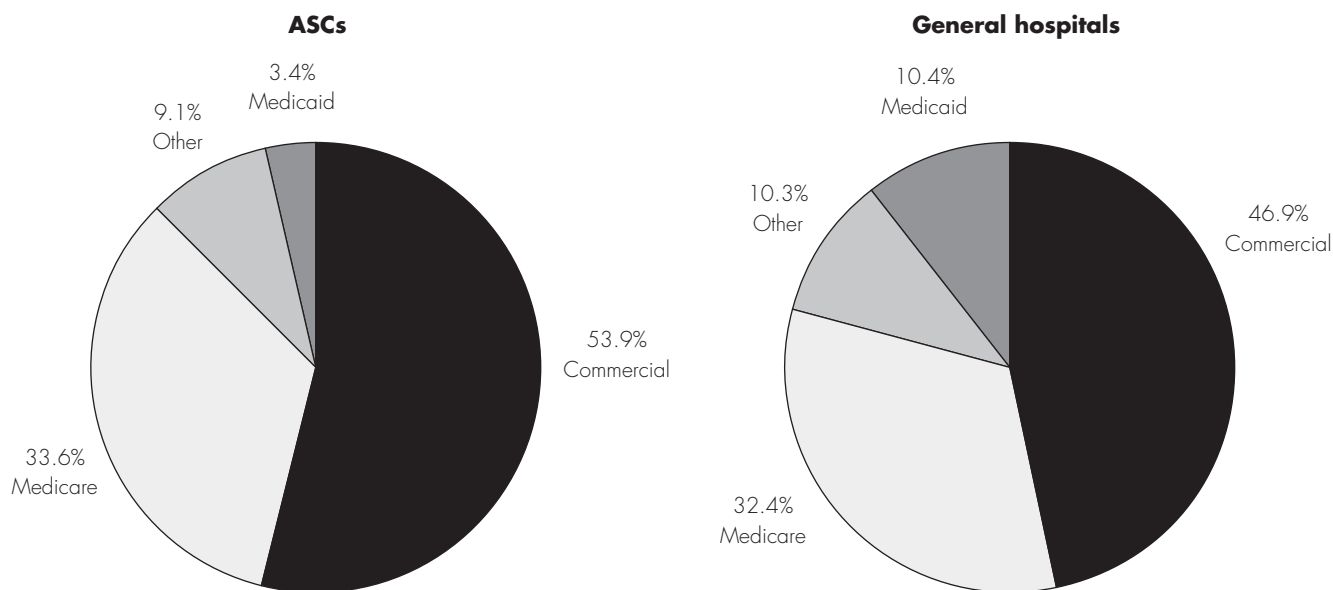
to have certain comorbidities such as dementia or an acute episode of chronic obstructive pulmonary disease than HOPD patients (Sloss et al. 2006).

According to data from Pennsylvania on Medicare and non-Medicare patients, ASCs are less likely than HOPDs to serve Medicaid patients. In 2008, Medicaid patients accounted for 3.4 percent of diagnostic and surgical procedures in ASCs, compared with 10.4 percent of procedures in HOPDs (Pennsylvania Health Care Cost Containment Council 2009) (Figure 2C-1).³ Commercially insured and Medicare patients represented a higher share of ASC procedures than HOPD procedures (87.5 percent vs. 79.3 percent). Some of these differences may be explained by the greater propensity of Medicaid patients to seek care in hospital emergency rooms or by ASCs' decisions to locate in areas with a higher proportion of commercially insured

(continued next page)

**FIGURE
2C-1**

Distribution of outpatient procedures by payer at ASCs and general acute care hospitals in Pennsylvania, FY 2008



Note: ASC (ambulatory surgical center), FY (fiscal year). Procedures include diagnostic and surgical services. Other payers include auto insurance, workers' compensation, and other government programs.

Source: Pennsylvania Health Care Cost Containment Council 2009.

Differences in types of patients treated in ambulatory surgical centers and hospital outpatient departments (cont.)

patients. National estimates from the National Survey of Ambulatory Surgery (NSAS), conducted by the Centers for Disease Control and Prevention (CDC), also show that ASCs treat a smaller share of Medicaid patients than hospitals. According to NSAS data compiled for MedPAC by CDC, visits by Medicaid patients accounted for 3.9 percent of total visits to freestanding ambulatory surgery centers in 2006, compared with 8.1 percent of total visits to hospital-based centers.

A study by Gabel and colleagues of Medicare and non-Medicare patients supports the finding that ASCs in Pennsylvania are less likely to serve Medicaid patients (Gabel et al. 2008). The article examined referral patterns for physicians in Pennsylvania who sent most of their patients to physician-owned ASCs rather than to HOPDs. These physicians were much more likely to refer their commercially insured and Medicare patients than their Medicaid patients to a physician-owned ASC. They sent more than 90 percent of their commercial and Medicare patients—but only 55 percent of their Medicaid patients—to an ASC instead of a hospital. This finding suggests that physicians refer their more lucrative patients to ASCs and the less lucrative patients to hospitals. However, it is also possible that physicians were more likely to refer Medicaid patients to a hospital because the patients needed a higher level of care or the patients had a Medicaid managed care plan that did not cover surgeries in an ASC.

Our analysis of Medicare claims found that the following groups are less likely to receive care in ASCs than in HOPDs: Medicare beneficiaries who also have Medicaid coverage, African Americans (who are more likely to have both Medicare and Medicaid), beneficiaries who

are eligible because of disability (under age 65), and beneficiaries who are age 85 or older (Table 2C-1).⁴ The smaller share of disabled and older beneficiaries treated in ASCs may reflect the healthier profile of ASC patients relative to HOPD patients. ■

**TABLE
2C-1**

The Medicare patient profile in ASCs is different from that in HOPDs, 2008

Characteristic	Percentage of beneficiaries	
	ASC	HOPD
Medicaid status		
Not Medicaid	87.4%	78.7%
Medicaid	12.6	21.3
Race/ethnicity		
White	89.3	85.4
African American	6.4	9.7
Other	4.3	4.9
Age		
Under 65	13.2	20.3
65 to 84	79.5	69.1
85 or older	7.4	10.6
Sex		
Male	42.0	43.4
Female	58.0	56.6

Note: ASC (ambulatory surgical center), HOPD (hospital outpatient department). Figures may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 5 percent standard analytical claims files, 2008.

http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_ASC.pdf.

The links between the ASC payment system, the outpatient PPS, and the MPFS raise broader questions about how Medicare and beneficiaries should pay for the same services that are provided in different settings. Should Medicare and beneficiaries pay the same amount

regardless of where a service is delivered? If so, how should that amount be determined? Alternatively, should the payment vary based on the cost of efficient providers in each setting, with an adjustment for the quality performance of providers? The current ASC payment system exhibits elements of each approach. Payments for many office-based procedures performed in ASCs

**TABLE
2C-2****Number of Medicare-certified ASCs has grown, 2003–2008**

	2003	2004	2005	2006	2007	2008
Number of centers	3,848	4,140	4,441	4,700	4,991	5,174
New centers	368	366	355	331	346	219
Exiting centers	65	74	54	72	55	36
Net percent growth in number of centers from previous year	8.5%	7.6%	7.3%	5.8%	6.2%	3.7%

Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Provider of Services file from CMS, 2008.

are equal to the nonfacility practice expense amount in the MPFS, and ASCs and HOPDs receive the same amount for pass-through drugs and devices. In contrast, payments for most ASC services are less than the comparable payment under the outpatient PPS, consistent with evidence that ASCs are a less costly setting and treat patients who are less medically complex (Medicare Payment Advisory Commission 2004). A question related to the conundrum of payments in different settings is: How should Medicare measure and reward quality for similar services provided in different settings? The Commission plans to explore these issues further in future work.

In the following sections, we consider the adequacy of payments for ASCs, focusing our analysis on beneficiaries' access to care, ASCs' access to capital, and ASCs' revenue from Medicare. As we cover these topics, we caution that the effect of Medicare payments on the financial health of ASCs is limited because Medicare spending accounts for about 20 percent of ASCs' overall revenue (Medical Group Management Association 2007).

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs of efficient providers and how much payments should change in the coming year (2011), we examine several measures of payment adequacy. We assess beneficiaries' access to care by examining the supply of ASC facilities and changes over time in the volume of services provided, providers' access to capital, and change in revenue from the Medicare program. Unlike our assessments of other provider types,

we did not use quality data in our analysis because CMS does not require ASCs to submit data on quality measures. Likewise, we cannot examine Medicare payments relative to providers' costs because CMS does not require ASCs to submit cost data.⁵

Our results show that beneficiaries have at least adequate access to care, ASCs have adequate access to capital, and Medicare payments to ASCs have grown substantially. Together, these measures suggest that payment rates were at least adequate through 2008. However, our results also indicate that ASCs are less likely than HOPDs to treat African Americans, Medicare beneficiaries who are eligible because of disability, and beneficiaries age 85 or older (see text box, p. 98–99). These demographic differences probably reflect differences in the health and Medicaid status of beneficiaries served by ASCs and HOPDs.

Beneficiaries' access to care: Supply and volume growth indicate access is adequate

The number of Medicare-certified facilities and volume of services provided to Medicare beneficiaries suggest growing access to ASCs. This growth may be beneficial to patients and providers because ASCs can offer them convenience and efficiency relative to HOPDs—the sector with the greatest overlap of surgical services with ASCs. For patients, ASCs can offer more convenient locations, shorter waiting times, and easier scheduling relative to HOPDs; for physicians, ASCs may offer more control over their work environment, customized surgical environments, and specialized staff. In addition, Medicare has lower payment rates and beneficiaries generally face lower coinsurance in ASCs than in HOPDs. Therefore, as long as this growth in ASCs does not represent some degree of overprovision of surgical services, the Commission recognizes the benefits they offer. However,

if the growth in ASCs has resulted in overprovision of services, reductions in aggregate program spending and beneficiary coinsurance that occur because of lower payment and coinsurance rates in the ASC system would be partially offset.

Capacity and supply of providers: Number of ASCs grew rapidly over last several years, but growth has slowed

The number of Medicare-certified ASCs has increased substantially over the last several years. From 2003 through 2007, an average of 353 new facilities entered the program per year, while an average of 64 closed or merged with other facilities (Table 2C-2). The average annual growth rate during this period was 6.7 percent.

The rate of growth in the number of Medicare-certified ASCs slowed in 2008. These ASCs numbered 5,174 in 2008, representing a 3.7 percent increase over 2007. The relatively slow growth continued into 2009, as the number of ASCs increased by 1.2 percent to 5,234 during the first three quarters of 2009, for an annual growth rate of 1.5 percent. The relatively slow growth in 2008 and in the first three quarters of 2009 may reflect the downturn in the economy that occurred in the later months of 2008. The substantial changes to the ASC payment system that occurred in 2008 also may have contributed to the slower growth, as investors may have waited to see how the new system affected the overall ASC market before deciding to open new facilities.

To provide a more complete picture of ASCs, we also examined the change in the number of operating rooms. From 2003 to 2008, the mean number of operating rooms per ASC increased slightly from 2.5 to 2.6, although the median number of operating rooms remained the same at 2. This finding indicates that the growth in the number of operating rooms has been similar to the growth in the number of ASCs.

Our analysis also indicates that ASCs are concentrated geographically. As of 2008, 40 percent of ASCs were concentrated in five states that accounted for 27 percent of fee-for-service (FFS) beneficiaries—California, Florida, Maryland, Texas, and Georgia. In contrast, Vermont, Alaska, and the District of Columbia had fewer than 10.⁶ In addition, in 2008, most Medicare-certified ASCs were for profit and located in urban areas, a pattern that has not changed over time (Table 2C-3). Beneficiaries who do not have access to an ASC may receive ambulatory surgical services in HOPDs and, in some cases, in physician

**TABLE
2C-3**

Most Medicare-certified ASCs are urban and for profit

ASC type	2003	2008
Urban	87%	88%
Rural	13	12
For profit	95	96
Nonprofit	5	4

Note: ASC (ambulatory surgical center).

Source: MedPAC analysis of Provider of Services file from CMS, 2008.

offices. In addition, beneficiaries living in remote rural areas may travel to urban areas to receive care in ASCs.

Steady growth in the number of Medicare-certified ASCs may indicate that Medicare's payment rates have been at least adequate, despite the fact that there were no positive updates to ASC payment rates from 2004 through 2009. However, Medicare payments, according to industry surveys, are not a substantial source of revenue for ASCs, accounting for about 20 percent of all ASC revenue (Deutsche Bank 2008, Medical Group Management Association 2007). In addition, other factors have likely influenced the rapid growth in the number of Medicare-certified ASCs:

- Changes in clinical practice and health care technology have expanded the provision of surgical procedures in ambulatory settings.
- Medicare began covering colonoscopy for colorectal cancer screening in 1998.
- ASCs may offer patients greater convenience than HOPDs in terms of better locations, the ability to schedule surgery more quickly, and shorter waiting times.
- For most procedures covered under the ASC payment system, beneficiaries' coinsurance is lower in ASCs than in HOPDs.⁷
- Physicians may find it more convenient and efficient to perform procedures in ASCs because they often have customized surgical environments and specialized staffing.

**TABLE
2C-4****The set of most frequently provided services in 2008 was similar in 2007**

Surgical service	2007		2008	
	Percent of volume	Rank	Percent of volume	Rank
Cataract surgery w/ IOL insert, 1 stage	19.9%	1	18.3%	1
Upper GI endoscopy, biopsy	7.9	2	7.9	2
Diagnostic colonoscopy	5.9	3	5.1	4
Colonoscopy and biopsy	5.5	4	5.5	3
After cataract laser surgery	5.4	5	4.7	5
Lesion removal colonoscopy	4.8	6	4.6	6
Injection spine: lumbar, sacral (caudal)	4.3	7	3.7	7
Inject foramen epidural: lumbar, sacral	3.1	8	3.3	8
Inject paravertebral: lumbar, sacral add on	2.9	9	2.8	9
Inject paravertebral: lumbar, sacral	1.9	10	1.9	10
Lesion remove colonoscopy	1.7	11	1.5	13
Colon cancer screen, not high-risk individual	1.7	12	1.5	14
Inject foramen epidural add on	1.6	13	1.8	11
Upper GI endoscopy, diagnosis	1.5	14	1.4	15
Colorectal screen, high-risk individual	1.4	15	1.5	12
Cystoscopy	1.3	16	1.2	17
Destruction paravertebral nerve, add on	1.1	17	1.3	16
Revision of upper eyelid	0.9	18	1.0	19
Cataract surgery, complex	0.9	19	1.1	18
Total	73.8		70.0	

Note: IOL (intraocular lens), GI (gastrointestinal). Columns may not sum to total due to rounding.

Source: MedPAC analysis of 5 percent standard analytical claims files, 2007 and 2008.

- Physicians who invest in ASCs can increase their practice revenue by receiving ASC facility payments. The federal anti-self-referral law (also known as the Stark Law) does not apply to surgical services provided in ASCs.
- Because physicians can probably perform more procedures in ASCs than in HOPDs in the same amount of time, they can increase their professional fees.

Newly covered services contributed strongly to growth in number of services in 2008; number of services provided grew rapidly during 2003–2008

Our examination of growth in service volume in ASCs focused on the number of services provided per FFS beneficiary. We used this measure rather than aggregate service volume because enrollment in FFS Medicare has been declining in recent years due to large increases in Medicare Advantage enrollment. We believe that growth in

aggregate service volume would have understated the extent to which FFS beneficiaries are receiving care in ASCs.

Our examination of the change in the number of ASC services per FFS beneficiary consisted of two parts. In the first part, we estimated how much of the growth in service volume from 2007 to 2008 was due to the increased number of services covered under the ASC payment system in 2008. We compared this value with the amount of growth attributable to services covered in both 2007 and 2008. This result gives us a sense of how well ASCs have adapted to the revised system that CMS implemented in 2008. In the second part, we compared the number of services per beneficiary in 2008 with the number in 2003 to obtain an estimate of historical growth in ASC service volume. For this part of the analysis, we limited the measure of service volume in 2008 to services covered under the ASC payment system in 2003.

**TABLE
2C-5****Volume of surgical services grew faster in ASCs than in HOPDs, 2003–2008**

Measure	Average annual percent change, 2003–2008	
	ASCs	HOPD surgical services
Number of services per FFS beneficiary	9.1%	–0.1%
Percent of FFS beneficiaries served	6.3	–1.3
Number of services per beneficiary served	2.7	1.2

Note: ASC (ambulatory surgical center), HOPD (hospital outpatient department), FFS (fee-for-service). To ensure comparability across sectors, we analyzed services that are payable by Medicare when provided in an ASC. In addition, the services included in the 2008 volume were limited to those that were covered in ASCs in 2003.

Source: MedPAC analysis of 5 percent standard analytic claims files.

Newly covered services contributed strongly to growth in service volume in 2008

Among the substantial revisions that CMS made to the ASC payment system in 2008, the large increase in the number of covered surgical services presented ASCs an opportunity to expand the array of services they provide to Medicare beneficiaries.

This year is the first time claims data were available for assessing the effects of this increase. Our analysis indicates that ASC service volume per FFS beneficiary increased by 10.5 percent in 2008.⁸ Services newly covered in 2008 accounted for 4.9 percentage points of the increase in service volume per FFS beneficiary, while services covered in both 2007 and 2008 accounted for the remaining 5.6 percentage points.⁹

Although newly covered services contributed much of the growth in service volume, the services that historically contribute the most to overall volume changed less from 2007 to 2008. For example, cataract removal with intraocular lens (IOL) insertion had the largest volume in both 2007 and 2008, accounting for 20 percent of volume in 2007 and 18 percent of volume in 2008. Moreover, the 19 most frequently provided services in 2007 were also the 19 most frequently provided in 2008, though the order differed slightly for each year (Table 2C-4). For these 19 services, service volume per FFS beneficiary increased by 4.8 percent from 2007 to 2008; but these 19 services accounted for a smaller share of total volume in 2008 than in 2007: 70 percent versus 74 percent.

Volume of services grew rapidly from 2003 through 2008

Apart from the substantial growth in 2008 in service volume per FFS beneficiary, this measure grew rapidly from 2003 through 2007—an average of 10.2 percent per year, compared with 10.5 percent in 2008.

We also examined growth in service volume per FFS beneficiary, excluding the effects of newly covered services over time. We estimated service volume only for services covered in both 2003 and 2008. This estimate provided a measure of the growth in service volume, without the effects of services that were added to the ASC payment system after 2003. Under this measure, the number of services per FFS beneficiary increased by an average of 9.1 percent per year (55 percent overall).¹⁰ This increase was driven by growth in the proportion of beneficiaries served, which increased by 6.3 percent per year from 2003 to 2008, and by growth in the number of services provided to each ASC patient, which increased by 2.7 percent per year (Table 2C-5). This growth occurred even though there were no positive updates to ASC rates from 2004 through 2009.

The growth in service volume provided in ASCs may reflect, in part, migration of services from HOPDs to ASCs. We compared growth in ASC service volume with the growth of ASC-covered services provided in HOPDs. Some results from that analysis suggest that surgical services may be migrating from HOPDs to ASCs:

- From 2003 through 2008, the number of surgical services per FFS beneficiary grew by 9.1 percent in

ASCs but decreased by 0.1 percent in HOPDs (Table 2C-5, p. 103).

- From 2003 through 2008, volume of nonsurgical services per FFS beneficiary in HOPDs grew by 4.0 percent, while surgical services declined by 0.1 percent. This result indicates that HOPD services not covered in ASCs were growing at a fairly robust rate, while ASC-covered services were declining.

Other data also suggest a shift in surgical services to ASCs. Research indicates that in Pennsylvania ASCs accounted for 10 percent of the diagnostic and surgical procedures performed in outpatient settings in 2000; the ASCs' share increased to 30 percent in 2008 (this study includes all patients, not just Medicare beneficiaries). Moreover, most of the growth in outpatient diagnostic and surgical procedures during those years occurred in ASCs (Pennsylvania Health Care Cost Containment Council 2009). This finding suggests a shift in surgical services to ASCs.

However, factors other than migration to ASCs may be contributing to the relatively slow growth of surgical services in HOPDs. HOPD services may also be migrating to physician offices. Moreover, relative to HOPDs, ASCs may offer more convenience to patients and providers. Finally, it is possible that HOPDs are finding some nonsurgical services more profitable than surgical services under the outpatient PPS.

If surgical services are shifting from HOPDs to ASCs, spending growth may slow accordingly. Starting in 2008, the payment rates for all surgical services are lower in the ASC payment system than in the outpatient PPS.¹¹ For example, we examined the number of cataract surgeries with IOL insert provided in ASCs and HOPDs. From 2003 to 2008, the proportion of these procedures provided in ASCs increased from 57 percent to 68 percent. Meanwhile, the payment rate for these procedures in 2008 was \$977 in ASCs and \$1,520 in HOPDs.

It is possible that physician ownership of ASCs could partially offset the effect of comparatively lower rates that would lead to lower Medicare spending. Most ASCs have some degree of physician ownership. Having an ownership stake may give physicians an incentive to perform more surgical services than they would if they provided outpatient surgical services only in HOPDs. To the extent that physicians act on this incentive, the reductions in spending due to lower payment rates in ASCs could be partially offset. Although there are differences between

specialty hospitals and ASCs, there is evidence that physician-owned specialty hospitals are associated with higher volume in a market. The Commission found that the entrance of a cardiac hospital in a market was associated with a greater increase in coronary artery bypass graft surgeries than would be expected (Medicare Payment Advisory Commission 2006). Because physicians are more likely to generate demand for the low-risk procedures typically provided in ASCs than the higher risk procedures provided in specialty hospitals, the effect of physician ownership on volume may be stronger in ASCs than in specialty hospitals.

Hospitals in Pennsylvania have alleged that ASCs treat healthier and better insured patients than hospitals, which places a financial strain on hospitals (DerGurahian 2009). Research conducted by the Commission and RAND found that ASCs treat less severely ill patients than HOPDs (Medicare Payment Advisory Commission 2003, Sloss et al. 2006). In addition, ASCs in Pennsylvania are less likely than HOPDs to treat Medicaid patients (see text box, p. 98–99). These factors may affect the long-term financial viability of hospitals.

Providers' access to capital: Growth in number of ASCs and ASCs' financial performance suggest adequate access

Owners of ASCs require capital to establish new facilities and upgrade existing ones. The change in the number of ASCs is the best indicator available of ASCs' ability to obtain capital. The number of ASCs continued to increase in 2008 and the first three quarters of 2009, although at a slower rate than in prior years (Table 2C-2, p. 100). The downturn in credit markets that occurred in the latter part of 2008 likely reduced providers' access to capital and may have had a role in this slowdown. Because the dramatic changes in the credit markets were unrelated to changes in Medicare payments, changes in access to capital in 2008 may not be a good indicator of Medicare payment adequacy.

Data on the financial performance of publicly traded ASCs also provide evidence of the sector's access to capital. From 2008 to 2009, earnings per share (EPS) of stock were expected to increase by more than 10 percent for one of the two publicly traded ASC chains (Deutsche Bank 2009a). EPS for the other publicly traded chain was projected to fall by 11 percent from 2008 to 2009 due to lower volume related to the weak economy (Deutsche Bank 2009b). However, EPS for this firm is expected to rebound by 6 percent in 2010. The earnings produced

**TABLE
2C-6****Medicare payments to ASCs have grown, 2003–2008**

	2003	2004	2005	2006	2007	2008
Medicare payments (billions of dollars)	\$2.2	\$2.5	\$2.7	\$2.8	\$2.9	\$3.1
Medicare payments per FFS beneficiary	\$66	\$73	\$78	\$85	\$90	\$99
Percent change per FFS beneficiary	12.9%	10.9%	6.8%	8.5%	5.7%	9.7%

Note: ASC (ambulatory surgical center), FFS (fee-for-service). Medicare payments include program spending and beneficiary cost sharing for ASC facility services.

Source: CMS, Office of the Actuary.

by these ASCs are one source of capital they can use to establish new facilities or upgrade existing ones. We caution, however, that the publicly traded ASC chains represent only 4 percent of all Medicare-certified ASCs, so their earnings growth may not be indicative of the ASC industry.

Medicare payments: Payments have increased rapidly

In 2008, ASCs received about \$3.1 billion in payments from Medicare and beneficiaries' cost sharing (Table 2C-6). From 2003 through 2007, spending per FFS beneficiary increased by an average of 8.0 percent per year, and by a larger increase of 9.7 percent in 2008. Using data from ASC claims, we estimate that services newly covered in 2008 accounted for 2.9 percentage points of the 2008 increase; services covered in both 2007 and 2008 accounted for the remaining 6.8 percentage points.

Earlier, we showed that services newly covered in 2008 had a strong effect on service volume growth from 2007 to 2008. The strong growth in spending and volume in 2008 suggests that ASC payment rates for these newly covered services were at least adequate. It is plausible that ASCs will furnish more of the newly covered services in succeeding years as more ASCs are able to modify their operations to furnish those services.

How should Medicare payments change in 2011?

Our payment adequacy analysis indicates that the supply of Medicare-certified ASCs has increased, beneficiaries' use of ASCs has increased, and access to capital has been adequate. In addition, CMS has provided a 1.2 percent increase to the ASC conversion factor for 2010. However,

our information for assessing payment adequacy is limited because, unlike for other facilities, CMS does not require ASCs to submit cost or quality data. These data are vital for a thorough evaluation of the adequacy of ASC payments.

Update recommendation

As the Commission considers an update to the ASC conversion factor for 2011, several goals should be balanced:

- Maintain beneficiaries' access to ASC services.
- Pay providers adequately so that they continue to furnish ASC services.
- Hold down the burden on beneficiaries, workers, and firms who finance Medicare.
- Maintain the sustainability of the Medicare program by holding down spending in the ASC sector.
- Keep providers under financial pressure to hold down costs.

A concern we have about the ASC payment system is that ASCs are in the midst of a long-term transition to new payment rates that CMS implemented in 2008. The extent of the changes to the payment system and the fact that they are still being phased in bring some uncertainty about how ASCs will perform under the new system. Early indications suggest that the restructured payment system is not detrimental and may be beneficial to ASCs' long-term future:

- ASCs' revenue and volume from Medicare-covered services increased substantially from 2007 to 2008, and much of this growth was from services newly covered in 2008.

- The number of ASCs increased in 2008 and has continued to increase in 2009 despite a substantial downturn in the credit markets.
- In Pennsylvania, ASCs' average operating margins from serving all patients (not just Medicare beneficiaries) increased from 24.1 percent in 2007 to 26.0 percent in 2008, an increase of 1.9 percentage points (Pennsylvania Health Care Cost Containment Council 2009). We caution that Medicare payments are about 20 percent of ASCs' total revenue, so Medicare payments have a limited effect on ASCs' overall operating margins.¹²

However, we need cost and quality data to fully assess the effects of the revised payment system and make informed decisions about the ASC update. Cost data are also needed to examine whether an existing input price index is an appropriate proxy for ASC costs or an ASC-specific market basket should be developed (see pp. 108–111). Quality data would enable CMS to assess ASCs' performance and reward high-performing providers. As part of a quality measurement program, CMS could also assess whether ASCs are performing surgery when it is indicated according to clinical guidelines.

CMS does not require ASCs to submit cost or quality data despite the Commission's recommendations in previous reports that ASCs submit such data to CMS (Medicare Payment Advisory Commission 2004, Medicare Payment Advisory Commission 2009). CMS has the authority to require ASCs to submit quality data in exchange for a full payment update. However, CMS has decided to postpone collection of those data to an undetermined date to allow ASCs time to adjust to the revised payment system and to give CMS time to identify the most appropriate quality measures (Centers for Medicare & Medicaid Services 2009a). CMS has also raised concerns about its resource constraints.

Those who argue against ASCs submitting cost data contend that ASCs typically are relatively small facilities and have limited resources for supplying the data. The Commission maintains, however, that ASCs are businesses, and businesses typically keep records of their costs such as for tax filing purposes. Moreover, other small providers submit cost data to CMS, including home health agencies and hospices. However, more than 5,000 ASCs provide services to Medicare beneficiaries, and collecting and reviewing cost reports from each ASC would place a large burden on CMS. Moreover, total Medicare

spending on ASCs is small relative to other sectors (\$3.1 billion). Consequently, CMS should seek to streamline the collection of cost data relative to other sectors. One possible mechanism is annual surveys of a random sample of ASCs—for example, a randomly selected set of facilities (with mandatory response). Positive attributes of a random sample are that all ASCs would not have to furnish data each year and that CMS would have to process data from only a fraction of them. A second possible mechanism is requiring all ASCs to submit cost reports that are more streamlined than hospital cost reports but still have enough information to fully assess the adequacy of ASC payment rates and develop a market basket for ASCs. A positive attribute of a streamlined cost report is that ASCs would not face the uncertainty presented by a random sample; each ASC would know that it has to submit a cost report each year. In addition, a complete set of cost data would be available for assessing payment adequacy and developing a market basket. The burden on CMS from auditing cost reports could be reduced by randomly selecting a fraction of all cost reports to audit.

Ensuring payment adequacy for ASCs is important to Medicare. The providers with the greatest overlap of surgical services with ASCs are HOPDs, and ASCs can offer advantages over HOPDs that are beneficial to maintain. Medicare cost per service is lower in ASCs, and beneficiaries generally have lower coinsurance in ASCs than in HOPDs for each procedure covered under the ASC payment system (Government Accountability Office 2006). Also, ASCs likely offer efficiencies to beneficiaries and physicians that are not available in HOPDs. For patients, ASCs may offer more convenient locations, shorter waiting times, and easier scheduling; for physicians, they may offer customized surgical environments and specialized staffing. Thus, it is vital that ASCs be paid adequately to ensure that beneficiaries have this option available.

RECOMMENDATION 2C

The Congress should implement a 0.6 percent increase in payment rates for ambulatory surgical center services in calendar year 2011 concurrent with requiring ambulatory surgical centers to submit cost and quality data.

RATIONALE 2C

A number of factors indicate that Medicare payments to ASCs have been at least adequate. The Commission has found continued growth in the number of Medicare-certified ASCs as well as robust growth in the volume of

services to Medicare beneficiaries, number of beneficiaries receiving care in ASCs, and number of services per beneficiary treated in ASCs. This growth occurred despite no positive updates to ASC payment rates from 2004 through 2009. In addition, the number of services covered under the ASC payment system increased substantially in 2008, providing ASCs with an opportunity to enhance their Medicare revenue. We have found that the newly covered services contributed 47 percent of the growth in service volume and 30 percent of the growth in spending from 2007 to 2008, suggesting that ASCs are adapting to the opportunities presented by the increase in covered services. In addition, the growth in the number of ASCs indicates they have at least adequate access to capital. Therefore, although we lack cost and quality data, the indicators we have suggest that payments have been adequate.

Another factor we considered in our recommendation is the advantages that ASCs offer relative to HOPDs. Specifically, ASCs can offer greater convenience to patients and providers. In addition, program spending and beneficiary cost sharing are lower in ASCs than in HOPDs on a per service basis. Therefore, a migration of surgical services from HOPDs to ASCs could reduce aggregate program spending and beneficiary cost sharing.

However, the impact on aggregate spending and cost sharing is difficult to quantify. If ASCs are drawing services away from settings where payment rates typically are lower, such as physician offices, the expansion in the number of ASCs would increase Medicare spending. In addition, most ASCs have some degree of physician ownership, which may give physicians an incentive to furnish more surgical services in ASCs than they would if they had to furnish all outpatient surgical services in HOPDs. Our analysis of physician-owned specialty hospitals suggests that such a phenomenon could occur in ASCs (Medicare Payment Advisory Commission 2006). To the extent that physicians act on this incentive, continued expansion of ASCs could offset some of the reductions in program spending and beneficiary cost sharing from lower payment and coinsurance rates.

On the basis of the results that indicate the adequacy of payments, the information we have about the effects of the revised payment system, and our concerns over the potential effect of ASC growth on program spending, we believe a moderate update is warranted. Also, the payment adequacy measures are similar to those for last year. Therefore, we recommend an update for 2011 equal to

last year's recommended update of 0.6 percent for 2010. We believe an update of this amount will enable ASCs to continue furnishing services to beneficiaries, thereby maintaining beneficiaries' access to ASC care.

It is vital that CMS begin collecting cost and quality data from ASCs without further delay. Hence, our recommendation for a modest update for 2011 is linked to a requirement that ASCs submit these data to CMS. Cost data from ASCs would enable analysts to determine the costs of an efficient provider and CMS to adjust payments accordingly. Cost data are also needed to examine whether an existing input price index is an appropriate proxy for ASC costs or an ASC-specific market basket should be developed. Quality data from ASCs would enable CMS to assess performance, reward providers through payment adjustments based on quality, and allow beneficiaries to compare quality across providers. ASCs that do not submit cost and quality data under such a requirement would still receive a 0.6 percent update for 2011 but could be subject to penalties. We note that not all ASCs would be required to submit cost information if CMS decides to collect cost data by surveying a random sample of ASCs.

IMPLICATIONS 2C

Spending

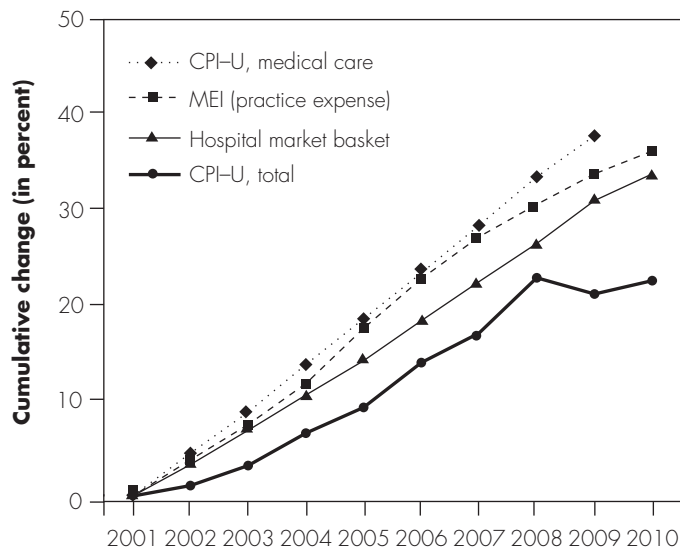
- CMS has discretion over which update factor to use for ASC payment rates, and the agency has decided to increase ASC payment rates by the consumer price index for all urban consumers (CPI-U) (Centers for Medicare & Medicaid Services 2007a). The most recently published measure of the CPI-U for 2011 is 1.4 percent (Centers for Medicare & Medicaid Services 2010). However, we recommend that the payment rates be increased by 0.6 percent. Therefore, our estimates indicate that the update recommendation for 2011 would decrease federal spending by less than \$50 million in the first year and by less than \$1 billion over five years, relative to current law.

Beneficiary and provider

- Because of the growth in the number of Medicare-certified ASCs and the number of beneficiaries treated in ASCs, we do not anticipate that this recommendation will diminish beneficiaries' access to ASC services or providers' willingness or ability to provide those services.
- ASCs will incur some administrative costs to submit cost and quality data.

**FIGURE
2C-2**

Cumulative growth of the CPI-U for medical care, hospital market basket, and PE component of the MEI is higher than the total CPI-U, 2001–2010



Note: CPI-U (consumer price index for all urban consumers), PE (practice expense), MEI (Medicare Economic Index), BLS (Bureau of Labor Statistics). The hospital market basket changes were forecast by CMS for fiscal years 2001–2010; they were not adjusted to reflect actual changes. Likewise, the MEI changes were forecast by CMS for calendar years 2001–2010 and were not adjusted to reflect actual changes. The MEI figures are for physician practice expenses and exclude CMS's productivity adjustment. The CPI-U data reflect changes from June of the prior year to June of the current year. With the exception of 2010, the CPI-U numbers are from BLS and reflect actual pricing changes, rather than a forecast. The 2010 total CPI-U change is a forecast published by CMS. Neither BLS nor CMS publishes a forecast for 2010 of the CPI-U for medical care.

Source: Crawford et al. 2009; Centers for Medicare & Medicaid Services 2009a; physician fee schedule and hospital inpatient prospective payment system final rules from CMS, 2000–2009.

Revisiting the ASC market basket

The projected change in providers' input prices is an important part of the Commission's annual update process. We are concerned that the market basket index that CMS uses to update ASC payments (the CPI-U) may not reflect ASCs' cost structure. Therefore, we examined whether an alternative market basket index would better measure changes in ASCs' input costs. Using data from a Government Accountability Office (GAO) survey of ASC costs in 2004, we compared the distribution of ASC costs with the distribution of hospital and physician practice

costs. We found that ASCs' cost structure is different than that of hospitals and physician offices, with a much larger share of expenses related to medical supplies and drugs than the other two settings, a much smaller share of labor costs than hospitals, and a smaller share of all other costs (such as rent and capital costs) than physician offices.

The CPI-U may not be a good proxy for ASC costs

Although CMS has historically used the CPI-U as the basis for Medicare's annual updates to ASC payments, this price index may not be a reasonable proxy for ASC input costs. From the inception of the ASC payment system in 1982, CMS used the CPI-U to periodically update ASC payments. When CMS revised the ASC payment system for 2008, the agency considered whether to continue using the CPI-U to update ASC payments. CMS stated that the statute does not mandate the use of a specific update mechanism but requires that the CPI-U be used as a default update if CMS does not otherwise update ASC payments (Centers for Medicare & Medicaid Services 2007b). Therefore, CMS decided to continue using the CPI-U on an annual basis after 2009. ASCs received a full update of 1.2 percent in 2010 based on the increase in the CPI-U (Centers for Medicare & Medicaid Services 2009b).

Although the CPI-U is a widely used measure of price inflation that is updated on a regular basis by the Bureau of Labor Statistics (BLS), the mix of goods and services in this price index probably does not reflect ASC inputs. The CPI-U is based on a sample of prices for a broad mix of goods and services, including food, housing, apparel, transportation, medical care, recreation, personal care, education, and energy (IHS Global Insight 2009). The weight of each item is based on spending for that item by a sample of urban consumers during the survey period. Although some of these items are probably used by ASCs, their share of spending on each item is likely very different from the CPI-U weight. For example, housing accounts for 43.4 percent of the entire CPI-U (Bureau of Labor Statistics 2009).

Do the market baskets for hospital or physician services better reflect ASC input costs?

Because CMS currently lacks data on ASCs' input costs, we explore whether one of two existing Medicare indexes would be an appropriate proxy for ASC input costs: the hospital market basket, which is used to update payments

for inpatient and outpatient hospital services, and the practice expense component of the Medicare Economic Index (MEI), which measures changes in physicians' practice expenses. (See online Appendix B to this chapter for more information on the hospital market basket and MEI.) It is reasonable to expect that ASCs have many of the same types of costs as hospitals and physician offices, such as medical equipment, medical supplies, building-related expenses, clinical staff, administrative staff, and malpractice insurance. However, our analysis of ASC, hospital, and physician costs showed that ASCs have a different cost structure than hospitals and physician offices.

Trends in the CPI-U, hospital market basket, and MEI

As a first step in analyzing alternative price indexes, we examined how the total CPI-U, CPI-U for medical care, hospital market basket, and practice expense component of the MEI have changed over time. Between 2001 and 2010, cumulative growth in the hospital market basket (33.8 percent) and the practice expense component of the MEI (36.2 percent) is much higher than the total CPI-U (22.6 percent) (Figure 2C-2). We did not include CMS's adjustment for productivity growth in the MEI. Between 2001 and 2009, the medical care component of the CPI-U also rose faster than the total CPI-U (BLS does not publish a forecast of the CPI-U for medical care for 2010).

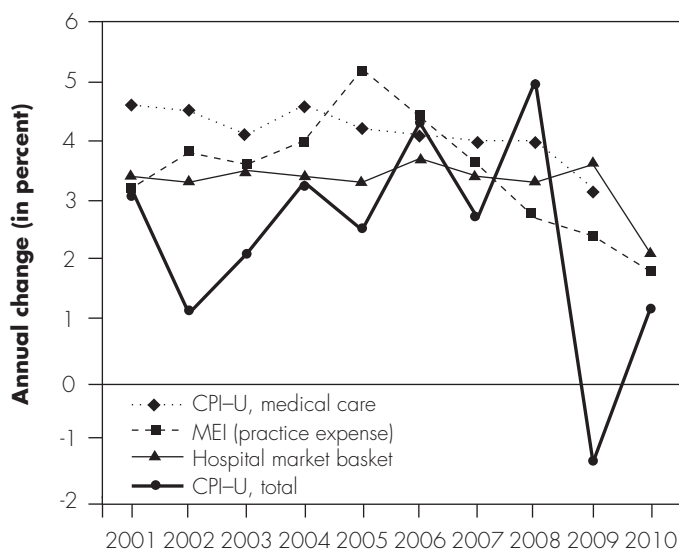
Between 2001 and 2010, the annual changes in the CPI-U for medical care, hospital market basket, and practice expense component of the MEI are more stable than the total CPI-U (Figure 2C-3).¹³ The change in the total CPI-U ranged from 5.0 percent in 2008 to -1.4 percent in 2009. The significant drop in 2009 was primarily due to a 25.5 percent decline in energy prices (Bureau of Labor Statistics 2009).

Comparing the distribution of ASC costs with hospital costs and physician practice expenses

We used 2004 ASC cost data from a GAO survey to compare the distribution of ASC costs with the distribution of hospital costs (derived from the hospital market basket) and physician practice expenses (derived from the practice expense portion of the MEI). Although the GAO data are not sufficient for comparing each category of costs across settings, they suggest that ASCs have a different cost structure from hospitals and physician offices. ASCs appear to have a much larger share of expenses related to medical supplies and drugs than the other two settings, a much smaller share of labor costs than hospitals, and a

FIGURE 2C-3

Annual changes in total CPI-U, CPI-U for medical care, hospital market basket, and PE component of the MEI, 2001-2010



Note: CPI-U (consumer price index for all urban consumers), PE (practice expense), MEI (Medicare Economic Index), BLS (Bureau of Labor Statistics). The hospital market basket changes were forecast by CMS for fiscal years 2001-2010; they were not adjusted to reflect actual changes. Likewise, the MEI changes were forecast by CMS for calendar years 2001-2010 and were not adjusted to reflect actual changes. The MEI numbers are for physician practice expenses and exclude CMS's productivity adjustment. The CPI-U data reflect changes from June of the prior year to June of the current year. With the exception of 2010, the CPI-U figures are from BLS and reflect actual pricing changes, rather than a forecast. The 2010 total CPI-U change is a forecast published by CMS. Neither BLS nor CMS publishes a forecast for 2010 of the CPI-U for medical care.

Source: Crawford et al. 2009; Centers for Medicare & Medicaid Services 2009a; physician fee schedule and hospital inpatient prospective payment system final rules from CMS, 2000-2009.

smaller share of all other costs (such as rent and capital costs) than physician offices.

Methodology As part of a study comparing the relative costs of ASC procedures with the relative costs of procedures paid under the outpatient PPS, GAO surveyed a random sample of 600 ASCs to obtain cost and procedure data from 2004 (Government Accountability Office 2006). GAO entered the data from income statements submitted by respondents into an electronic file and tested the cost and procedure data for reliability, concluding that data from 290 facilities were sufficiently reliable.¹⁴ GAO provided us with this electronic file, which did not identify

**TABLE
2C-7**

Comparing the distribution of ASC costs to hospital costs and physician practice expenses

Share of:

Cost category	Total ASC costs	Hospital costs	Physician practice expenses
Employee compensation	40.0%	55.1%	39.2%
Other professional services	8.0	11.3	13.5
Medical supplies and drugs	25.7	7.5	9.1
All other costs	26.2	26.0	38.1

Note: ASC (ambulatory surgical center). The shares of hospital costs are derived from the hospital operating market basket (92.4 percent of total hospital costs) and the capital input price index (7.6 percent of total costs). The shares of physician practice expenses are derived from the practice expense portion of the Medicare Economic Index (MEI) and exclude CMS's productivity adjustment to the MEI. The category of other professional services includes the following hospital cost categories: professional fees (labor related and non-labor related), financial services, and administrative and business support services. The category of other professional services is equivalent to the "other expenses" category in the MEI, which includes accounting, legal, office management, continuing medical education, and other professional expenses. Medical supplies and drugs include intraocular lenses. Employee compensation includes wages and benefits. All other costs include rent, capital costs, utilities, malpractice insurance, medical equipment, maintenance, repair, housekeeping, laundry, and certain other expenses. Figures in columns may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 2004 ASC cost data from the Government Accountability Office; Centers for Medicare & Medicaid Services 2009b, Centers for Medicare & Medicaid Services 2009c.

individual ASCs. Because the file we received from GAO listed expense items at a disaggregated level (e.g., several types of medical supplies were itemized separately), we grouped hundreds of related items into standardized categories. Because GAO was primarily interested in the cost of medical equipment, medical supplies, clinical staff, and general overhead, the file did not contain data for many ASCs on several types of costs, such as rent, capital costs, utilities, malpractice insurance, and certain other expenses. However, the file had information for most ASCs on total costs, medical supplies and drugs (including IOLs), employee compensation, and other professional services (e.g., legal, accounting, and office management services).¹⁵ Therefore, we calculated the distribution of ASC costs (cost weights) for the following categories: medical supplies and drugs, employee compensation, other professional services, and all other costs. The all other costs category was calculated as a residual (total costs less costs for the first three categories).¹⁶ All other costs includes rent, capital costs, utilities, medical equipment, malpractice insurance, maintenance, repair, housekeeping, laundry, and certain other expenses.

We excluded ASCs that lacked data for any one of these cost categories and also trimmed the top and bottom 5 percent cost weights.¹⁷ The final cost weights are based on data from 233 facilities. The weights were calculated by summing the dollars within a category and dividing this amount by the sum of total costs across all the ASCs.¹⁸ We

compared these ASC cost weights with the distribution of hospital costs and physician practice expenses.

Results Table 2C-7 shows that ASCs have a different distribution of costs than hospitals and physician offices. ASCs' larger share of costs than the other settings for medical supplies and drugs could be related to their high volume of cataract removal and lens insertion procedures (20 percent of total Medicare volume in 2007). These procedures use IOLs, which are included in the medical supplies category and are relatively expensive.¹⁹ Another factor could be that ASCs furnish primarily surgical procedures but hospitals and physicians also provide a significant number of evaluation and management services, which probably have lower supply costs than surgical procedures. The share of ASC costs related to employee compensation (40.0 percent) is similar to that of physician offices (39.2 percent) but much smaller than the hospital share (55.1 percent). The share of ASC costs related to overall labor expenses (employee compensation plus other professional services) is 48 percent, which is consistent with GAO's finding that ASCs' labor costs account for half of their total costs (Government Accountability Office 2006). The share of ASC costs in the all other costs category is almost the same as the hospital share but is smaller than the physician office proportion.

CMS should use new ASC cost data to select an appropriate price index for ASCs

The ASC cost data used in our comparative analysis are five years old and do not contain information on several types of costs. Therefore, the Congress should require ASCs to submit new cost data to CMS. CMS should use this information to examine whether an existing Medicare

price index is an appropriate proxy for ASC costs or an ASC-specific market basket should be developed. A new ASC market basket could include the same types of costs that appear in the hospital market basket or MEI but with different cost weights that reflect the structure of ASC costs. ■

Endnotes

- 1 Eighty-seven percent of ASC procedures have their payment rates based on the outpatient PPS relative weights.
- 2 Risk scores represent beneficiaries' expected service use given their health status, relative to that of the national average beneficiary. For the 10 categories of procedures with the highest share of Medicare payments to ASCs, patients treated in ASCs in 1999 had somewhat lower average risk scores than HOPD patients.
- 3 These data are based on 226 ASCs and 170 hospitals.
- 4 Because ASCs are disproportionately located in some states (California, Florida, Texas, Maryland, and Georgia), we weighted beneficiaries so that in each state the percentage of beneficiaries receiving care in ASCs matched the national percentage. This process prevented idiosyncrasies in states that have high concentrations of ASCs from biasing the results.
- 5 The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 eliminated a requirement that the Secretary collect cost data from ASCs every five years.
- 6 Vermont, Alaska, and the District of Columbia have certificate-of-need laws that apply to ASCs, which may explain the low number of ASCs in those states.
- 7 By statute, coinsurance for a service paid under the outpatient PPS cannot exceed the hospital inpatient deductible (\$1,100 in 2010). The ASC payment system does not have the same limitation on coinsurance, and for a few services the ASC coinsurance exceeds the inpatient deductible. In these instances, the ASC coinsurance exceeds the outpatient PPS coinsurance.
- 8 Our analysis of service volume in 2008 included surgical procedures only, as nearly all of these procedures had Current Procedural Terminology codes in the range 10000–69999. Our analysis of 2008 service volume did not include services that were separately paid in 2008 but were either packaged or paid under a separate fee schedule in 2007, such as radiology services, brachytherapy sources, drugs, and pass-through devices. In addition, it did not include services that are packaged in 2008.
- 9 Office-based procedures accounted for most of the growth from newly covered services. These procedures accounted for 4.2 percentage points of the volume increase from 2007 to 2008.
- 10 If we include the services that were newly covered in 2008, the average annual increase from 2003 through 2008 in the number of services per FFS beneficiary is 10.3 percent.
- 11 In 2007, ASC payment rates could be below or equal to HOPD rates; before 2007, ASC rates could be above, below, or equal to HOPD rates.
- 12 The operating margins for ASCs have important differences from the margins in other sectors such as hospitals. In particular, the margins for most ASCs do not reflect income taxes or the income going to physician owners.
- 13 The hospital market basket changes were forecast by CMS for fiscal years 2001–2010; they were not adjusted to reflect actual changes. Likewise, the MEI changes were forecast by CMS for calendar years 2001–2010 and were not adjusted to reflect actual changes. The MEI changes are for practice expenses and exclude CMS's productivity adjustment. The CPI-U data reflect changes from June of the prior year to June of the current year. With the exception of 2010, the CPI-U numbers are from BLS and reflect actual pricing changes rather than a forecast. The 2010 CPI-U change is a forecast published by CMS.
- 14 GAO found that there was no geographic bias among the responding ASCs but did not report on the distribution of responding facilities by specialty.
- 15 Employee compensation includes wages, salaries, and benefits.
- 16 On the basis of GAO's method, we also excluded costs that are not covered by Medicare's payments for ASC services, such as bad debt, advertising, entertainment, lobbying, charity, and separately payable clinical labor (such as physicians, anesthesiologists, and other practitioners who are paid under the physician fee schedule).
- 17 We trimmed the highest and lowest cost weights to reduce the influence of outlier values. Trimming the weights did not significantly influence the final values. When calculating the hospital market basket weights, CMS also trims the top and bottom 5 percent values.
- 18 This method, which is used by CMS to calculate the hospital market basket weights, means that more costly ASCs have a greater influence on the final weights than less costly ASCs.
- 19 Under the prior ASC payment system, Medicare included a \$150 allowance for IOLs in the payment for cataract procedures. The cost of IOLs is bundled into the procedure payment rate under the current ASC payment system. However, CMS makes a separate \$50 payment for certain new technology IOLs.

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2D SECTION

Outpatient dialysis services

R E C O M M E N D A T I O N

- 2D** The Congress should update the composite rate by the projected rate of increase in the end-stage renal disease market basket less the adjustment for productivity growth for calendar year 2011.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 1 • ABSENT 1

2D

SECTION

Outpatient dialysis services

Section summary

Outpatient dialysis services are used to treat individuals with end-stage renal disease (ESRD). In 2008, about 330,000 beneficiaries were covered by Medicare and received dialysis from nearly 5,000 ESRD facilities. In that year, Medicare expenditures for outpatient dialysis services, including separately billable drugs administered during dialysis, were \$8.6 billion.

Assessment of payment adequacy

Our payment adequacy indicators for outpatient dialysis services are generally positive. Our analysis suggests that a moderate update of the composite rate is in order and that dialysis providers can achieve efficiency gains similar to those in the economy at large. Therefore, the Commission recommends updating the composite rate for calendar year 2011 by the projected rate of increase in the ESRD market basket less the adjustment for productivity growth. Based on CMS's latest forecast of the market basket, this recommendation would yield an update of 0.7 percent.

Beneficiaries' access to care—Measures include examining the capacity and supply of providers, beneficiaries' ability to obtain care, and changes in the volume of services.

- **Capacity and supply of provider**—Dialysis facilities appear to have the capacity to meet beneficiaries' demand. Growth in the number of dialysis

In this section

- Are Medicare payments adequate in 2010?
.....
- How should Medicare payments change in 2011?
.....

treatment stations has generally kept pace with growth in the number of dialysis beneficiaries.

- ***Beneficiaries' ability to obtain care***—The number of ESRD facilities continues to increase. The few facility closures do not appear to disproportionately affect African Americans or beneficiaries dually eligible for Medicare and Medicaid. Freestanding facilities, which treat most dialysis beneficiaries, did not change the proportion of African American, dual eligibles, or elderly treated between 2007 and 2008.
- ***Volume of services***—Since 1996, the number of dialysis treatments grew at an average annual rate that kept pace with growth in the number of beneficiaries. Statutory and regulatory changes that CMS implemented beginning in 2005 reversed spending trends for dialysis drugs. Although spending on dialysis drugs decreased since 2004, our analysis suggests that the volume of drugs increased but at a slower rate than in previous years.

Quality of care—Dialysis quality has improved over time for some measures, such as use of the recommended type of vascular access—the site on the patient's body where blood is removed and returned during dialysis. Other measures suggest that improvements in quality are still needed. In particular, the proportion of all dialysis patients accepted for the registry on the kidney transplant waiting list remains low and rates of hospitalization and mortality remain high.

Providers' access to capital—Information from investment analysts suggests that access to capital for dialysis providers continues to be adequate. The number of facilities, particularly for-profit facilities, continues to increase.

Medicare payments and providers' costs—In 2008, the Medicare margin for composite rate services and dialysis drugs for freestanding facilities was 3.2 percent. We project the Medicare margin for freestanding dialysis facilities will be 2.5 percent in 2010. This projection reflects the 1 percent update to the composite rate effective in 2009 and 2010, which is less than CMS's forecast of the increases in providers' costs during this period. This projection does not take into account the 2 percent reduction in total spending that the Medicare Improvements for Patients and Providers Act of 2008 mandated to begin in 2011 under the new dialysis payment method because: (1) the regulatory provisions to implement the new payment method are not finalized and (2) providers' response to the new payment method is unknown. Including drugs and services in the payment bundle that Medicare now separately pays for may lead to improvements in the efficiency of care. ■

Dialysis treatment choices

Dialysis is a treatment to replace the filtering function of the kidneys when they fail. The two types of dialysis—peritoneal dialysis and hemodialysis—remove waste products from the bloodstream differently. Peritoneal dialysis uses the lining of the abdomen as a filter to clear wastes and extra fluid and is usually performed independently in the patient's home. Hemodialysis uses an artificial membrane encased in a dialyzer to filter the patient's blood. Although hemodialysis is usually provided in dialysis facilities, it can also be done in the patient's

home. Each dialysis method (modality) has advantages and disadvantages—no one type of dialysis is best for everyone. People choose one type of dialysis over another for many reasons, including quality of life, personal preference, physician recommendation, and awareness of different treatment methods. Some patients switch from one dialysis method to another when their needs or condition changes. The advantages and disadvantages of the different dialysis methods are summarized in Table 2D-A1 in the online appendix to this chapter. ■

Background

End-stage renal disease (ESRD) is a chronic illness characterized by permanent kidney failure. ESRD patients include those who are treated with dialysis—a process that removes wastes and fluid from the body—and those who have undergone kidney transplantation and have a functioning kidney transplant. Because of the limited number of kidneys available for transplantation, 70 percent of ESRD patients undergo dialysis. The text box summarizes the two types of dialysis. Patients receive additional items and services related to their dialysis treatments, including dialysis drugs to treat conditions such as anemia and bone disease resulting from the loss of kidney function.

The 1972 amendments to the Social Security Act extended Medicare benefits to people with ESRD who are eligible for Social Security benefits, even those under age 65. To qualify for the ESRD program, individuals must be fully or currently insured under the Social Security or Railroad Retirement program, entitled to benefits under the Social Security or Railroad Retirement program, or the spouse or dependent child of an eligible beneficiary.¹ ESRD patients entitled to Medicare due to kidney disease alone have the same benefits as other Medicare beneficiaries.

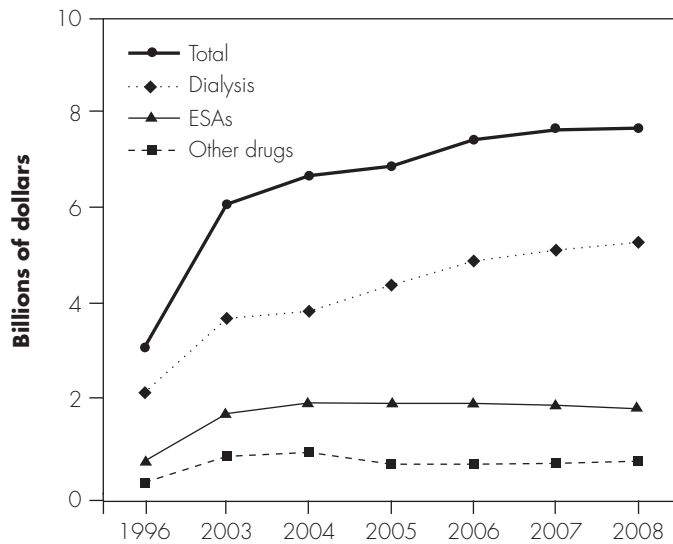
For beneficiaries entitled to benefits due to ESRD alone, Medicare coverage does not begin until the fourth month after the start of dialysis. Exceptions to this statutory provision are beneficiaries who have undergone a kidney transplant or who are trained to perform dialysis at home.

About half of new ESRD patients are under age 65 and thus are entitled to Medicare because they have chronic renal failure. In 2008, there were an estimated 110,000 new dialysis patients.²

If an employer group health plan (EGHP) covers a beneficiary at the time of ESRD diagnosis, it is the primary payer for the first 33 months of care. Medicare is the secondary payer during this period. EGHPs include health plans that beneficiaries were enrolled in through their own employment or through a spouse's or parent's employment before becoming eligible for Medicare due to ESRD.

In 2008, about 330,000 dialysis beneficiaries were covered by the Medicare program.³ Compared with all Medicare beneficiaries, dialysis beneficiaries are disproportionately younger and African American. A substantial number of dialysis patients are dually eligible for Medicare and Medicaid benefits: about one-quarter of newly diagnosed ESRD patients and 45 percent of current ESRD patients. About one-quarter of newly diagnosed patients were covered by an EGHP (United States Renal Data System 2009).

Most dialysis beneficiaries receive care in freestanding dialysis facilities. Such facilities account for 89 percent of all facilities and treat about 90 percent of dialysis beneficiaries. The two largest dialysis organizations supply the major portion of this industry's output; in 2008, they operated 60 percent of all facilities and treated about 65 percent of dialysis beneficiaries.

**FIGURE
2D-1****Statute and regulations changed
trends in payments to freestanding
dialysis facilities beginning in 2005**

Note: ESAs (erythropoiesis-stimulating agents). ESAs include erythropoietin and darbepoetin alpha.

Source: MedPAC analysis of claims submitted by freestanding dialysis facilities to CMS.

Since 1983, Medicare pays dialysis facilities a predetermined payment for each dialysis treatment they furnish. Under the prospective payment—the composite rate—Medicare covers the cost of some (but not all) services associated with a single dialysis treatment, including nursing, dietary counseling and other clinical services, dialysis equipment and supplies, social services, and certain laboratory tests and drugs. In addition, Medicare pays separately for certain drugs and laboratory tests that have become a routine part of care since 1983. Since 2005, Medicare has paid providers an add-on payment to the composite rate. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) created this add-on payment by shifting some of the payments previously associated with separately billable dialysis drugs to the composite rate (via the add-on payment) and mandated that these changes occur in a budget-neutral manner.

In 2008, payment for composite rate services (including the add-on payment) averaged about \$158 per treatment, while the payment for drugs used to treat conditions resulting from the loss of kidney function (referred to in this chapter as dialysis drugs) averaged nearly \$75 per

treatment. The Commission's Payment Basics provides more information about Medicare's method for paying for outpatient dialysis services (available at http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_dialysis.pdf).

Medicare spending on outpatient dialysis services

For both freestanding and hospital-based facilities, Medicare spending for dialysis services, including separately billable drugs administered during dialysis, totaled about \$8.6 billion in 2008, an increase of 0.3 percent compared with 2007. Medicare expenditures for composite rate services and dialysis drugs averaged about \$26,000 per beneficiary in 2008.

Freestanding facilities treat most dialysis beneficiaries and account for nearly 90 percent of spending (about \$7.8 billion in 2008) for composite rate services and dialysis drugs. Since 2004, total payments to dialysis facilities grew more slowly than in the past because spending on dialysis drugs decreased (Figure 2D-1). Between 1996 and 2004, expenditures for composite rate services and dialysis drugs increased by about 10 percent per year but then slowed between 2004 and 2008 to a 4 percent average annual increase. Specifically:

- Since 2005, drug expenditures to freestanding dialysis providers declined by 3 percent per year (from \$2.8 billion to \$2.5 billion). By contrast, between 1996 and 2004, dialysis drug expenditures grew by 15 percent per year, from \$951 million to \$2.8 billion.
- Before and after 2005, expenditures for composite rate services increased at about the same annual rate—8 percent.

The decline in spending on dialysis drugs is partly due to provisions in the MMA that, beginning in 2005, increased Medicare's payment rate for composite rate services but lowered the rate for dialysis drugs. The MMA required that CMS base payment amounts for all dialysis drugs on providers' acquisition costs, which has resulted in a lower payment rate for most dialysis drugs.⁴ Since 2006, the agency pays 106 percent of the average sales price for dialysis drugs.

Despite the decrease in the payment rate, the total volume of dialysis drugs increased between 2004 and 2007. Between 2007 and 2008, the volume of most dialysis drugs continued to increase with one notable exception. The volume of erythropoiesis-stimulating

agents (ESAs) declined during this period. ESAs are drugs (erythropoietin and darbepoetin alpha) used to treat anemia, a common condition among dialysis patients, and account for nearly 70 percent of spending on dialysis drugs. The recent decline in ESA volume is linked to: (1) changes in CMS's payment policies for ESAs and (2) new clinical evidence about the appropriate use of ESAs. We discuss these two changes in more detail later in the chapter.

A new dialysis prospective payment method is planned to begin in 2011

While the MMA decreased the profitability of most dialysis drugs, the law did not change the two-part structure of the outpatient dialysis payment method. However, the Congress recently passed a law—the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA)—that will modernize the payment method by including dialysis drugs in the payment bundle beginning in 2011. MIPPA calls for CMS to implement a new dialysis prospective payment system (PPS) that would broaden the dialysis payment bundle beginning in 2011 and initiate a quality incentive program beginning in 2012.

MIPPA's provisions are consistent with the Commission's long-standing recommendation to modernize the outpatient dialysis payment system (Medicare Payment Advisory Commission 2001). We have repeatedly said that Medicare could provide incentives for controlling costs and promoting quality care by broadening the bundle to include drugs, laboratory services, and other commonly furnished items that providers currently bill separately and by linking payment to quality. A bundled rate would create incentives for facilities to furnish services more efficiently. For example, a bundled rate would reduce incentives inherent in the current payment method to overutilize drugs.

CMS issued a proposed rule in September 2009 that, if finalized, would enact MIPPA's provisions by making three key changes to the outpatient dialysis payment method. Table 2D-1 (p. 122) compares the proposed provisions with the current payment method. The first change to the payment method concerns definition of the payment bundle. Beginning in 2011, the proposed dialysis payment bundle would include:

- composite rate services,
- Part B separately billable drugs furnished by the facility,

- separately billable laboratory tests ordered by the facility and separately billable laboratory tests (performed by independent laboratories) ordered by physicians who are paid the monthly capitation payment amount,
- Part B separately billable equipment and supplies furnished by the facility,
- selected ESRD-related Part D drugs, and
- self-dialysis training services.

Second, CMS's proposal would increase the number of beneficiary-level and facility-level payment adjusters. MIPPA gave the Secretary the authority to adjust the payment rate by appropriate factors that affect providers' costs. The agency proposed augmenting the current beneficiary-level adjusters used for adults—age and body mass—by including beneficiaries' sex, the presence of selected comorbidities, and onset of dialysis (for the first four months of dialysis treatment).⁵ For adults, CMS's proposal would maintain the same payment rate for the different types of dialysis methods. For pediatric beneficiaries, CMS proposed adjusting payment by age, the presence of selected comorbidities, and dialysis method.⁶ Under the current payment method, beneficiary-level adjusters are not used for pediatric beneficiaries.

MIPAA required a facility-level adjustment for low-volume facilities. CMS's proposal defines a low-volume facility as one that furnished 3,000 or fewer treatments annually in the three years before the payment year. Included in the facility's treatment total would be treatments provided by facilities owned by the same organization that are located within 25 miles of the facility in question. The new payment method would continue to use the same wage index that is used under the current payment method (the acute care hospital wage index).

Although MIPPA gave the Secretary the authority to change the unit of payment, CMS's proposal maintains the current unit of payment as a single dialysis treatment. The new payment method will be phased in over three years; facilities may elect to bypass the transition (by notifying CMS 60 days before January 1, 2011).

A third change is proposed for calendar year 2012 with implementation of a quality incentive program, which MIPPA mandated. CMS is proposing a pay-for-performance initiative using two measures that assess anemia management and one measure that assesses

**TABLE
2D-1****Key features of the current dialysis payment method and the proposed prospective payment method that is expected to begin in 2011**

Payment method feature	Current payment method	Proposed new payment method
Payment bundle	Composite rate services, which include: nursing, dietary counseling and other clinical services, dialysis equipment and supplies, social services, and certain laboratory tests and drugs.	<ul style="list-style-type: none"> • Composite rate services • Separately billable (Part B) injectable dialysis drugs and their oral equivalents • ESRD-related laboratory tests • Selected ESRD Part D drugs • Self-dialysis training services
Unit of payment	Single dialysis treatment	Single dialysis treatment
Add-on payment to the composite rate	Yes	None
Self-dialysis training services adjustment	Yes	None
Beneficiary-level adjustments	<ul style="list-style-type: none"> • For adults: age and body mass • For pediatric beneficiaries: none 	<ul style="list-style-type: none"> • For adults: age, sex, dialysis onset, body mass, 11 comorbidities • For pediatric patients: age, presence of four comorbidities, dialysis method
Facility-level adjustments	Wage index	<ul style="list-style-type: none"> • Wage index • Low-volume adjustment
Outlier policy	None	Applies to the portion of the broader payment bundle composed of the drugs and services that are currently separately billable
Quality incentive program	None	Begins in 2012

Note: ESRD (end-stage renal disease).

Source: MedPAC analysis of CMS 2009 proposed ESRD rule.

dialysis adequacy. This information would be obtained from claims submitted by ESRD facilities. Facilities that do not meet the performance standard could receive up to a 2 percent reduction in their payment rate.

As CMS phases in the new PPS, the Commission intends to continue its annual assessment of payment adequacy by examining beneficiaries' access to care, changes in dialysis quality of care and providers' access to capital, and the relationship between Medicare's payments and providers' costs. In addition, the Commission is developing new beneficiary quality measures, including rates of rehospitalization.

Providers of outpatient dialysis services

During the past six years, an increasing proportion of dialysis facilities are freestanding, owned by publicly

traded companies, operated by a chain (i.e., multifacility enterprises), and for profit (Table 2D-2 and Figure 2D-2, p. 124). By chain, we mean facilities operated under common ownership; CMS's Dialysis Facility Compare database indicates "whether or not the facility is owned or managed by a chain organization." Recently, the dialysis sector has evolved into an oligopoly, in which a small number of firms supply the major portion of an industry's output. In 2005 and 2006, the four largest dialysis organizations merged into two for-profit organizations. Together the two largest dialysis organizations (Fresenius Medical Care North America and DaVita) account for about 60 percent of all facilities and about 70 percent of freestanding facilities (Figure 2D-2). The recent trends in the profit status and consolidation among dialysis providers suggest that the dialysis industry is an attractive business to for-profit

**TABLE
2D-2**

The total number of dialysis facilities is growing; for-profit and freestanding dialysis providers are a larger share over time

	2009	Average annual percent change	
		2003-2009	2008-2009
Total number of dialysis facilities	5,211	3.5%	5.1%
Number of dialysis stations			
Total	91,465	4.0	5.4
Mean (per facility)	17.6	0.5	0.3
	Percent of facilities	Average annual percent change in number of facilities	
Nonchain	21%	-2.3%	3.6%
Affiliated with any chain	79	5.5	5.5
Affiliated with one of the two large dialysis organizations	60	4.5	6.8
Rural	25	3.2	4.2
Urban	75	3.6	5.8
Freestanding	89	4.4	5.9
Hospital based	11	-2.5	-3.9
For profit	81	4.7	5.9
Nonprofit	19	-0.7	1.9

Note: Nonprofit includes those designated as either nonprofit or government.

Source: Compiled by MedPAC from the 2003, 2008, and 2009 Dialysis Facility Compare database from CMS.

providers and that there are efficiencies and economies of scale in providing dialysis care.

Since 2003, freestanding facilities have increased by more than 4 percent annually and currently account for 89 percent of all facilities (Table 2D-2). During this period, for-profit facilities have increased at 4.7 percent per year and account for 81 percent of all facilities. The number of hospital-based facilities decreased from 660 to 566 during this time (data not shown). Most freestanding facilities (91 percent) are for profit; by contrast, most hospital-based facilities (94 percent) are nonprofit (data not shown). Most freestanding dialysis facilities (87 percent) are affiliated with a chain, whereas most hospital-based facilities (79 percent) are not operated by a chain (data not shown). In terms of size, as measured by the number of dialysis treatment stations (i.e., the equipment used to provide dialysis to a patient), freestanding facilities are, on average, larger than hospital-based facilities (data not

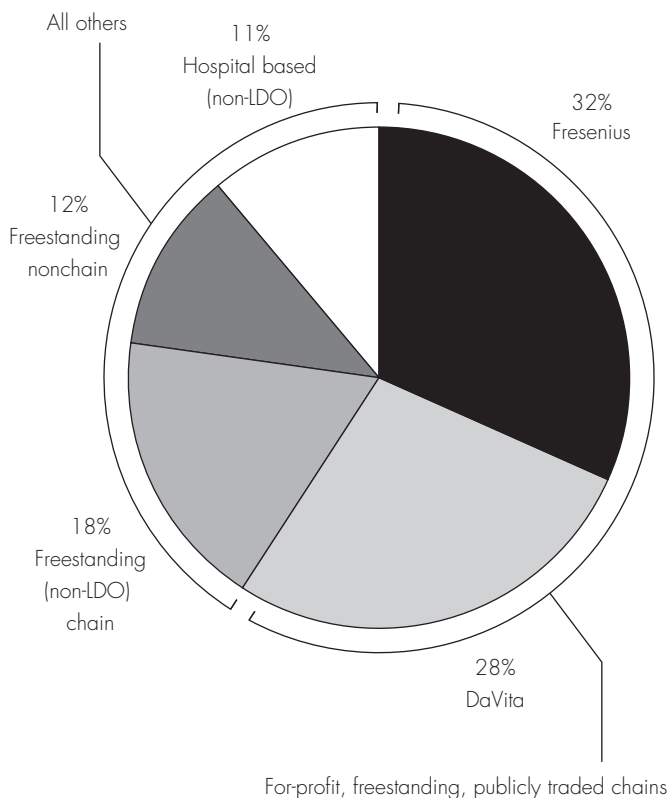
shown). In 2009, freestanding facilities had 18 dialysis stations, on average, while hospital-based facilities averaged 14 stations (data not shown).

About one-quarter of dialysis facilities are located in rural areas. Rural and urban facilities have grown at similar rates during the past five years. However, between 2008 and 2009, urban facilities grew at a higher rate than rural facilities (5.8 percent vs. 4.2 percent, respectively). Freestanding facilities account for 85 percent of all facilities in rural areas, while hospital-based facilities account for the remainder. The two largest dialysis organizations, which together operate in 48 states, account for about 60 percent of all facilities in rural areas.

Medicare is the principal payer for most dialysis facilities. Our analysis of cost reports submitted by freestanding dialysis facilities indicates that Medicare accounts for about three-quarters of treatments furnished by freestanding facilities.

**FIGURE
2D-2**

The dialysis industry is composed primarily of freestanding, for-profit facilities affiliated with a chain, 2009



Note: LDO (two largest dialysis organizations). Fresenius Medical Care North America and DaVita are the two LDOs. The LDOs operate freestanding facilities. Facilities included in the "freestanding chain" category are freestanding facilities that are operated by a chain other than the LDOs. Total may not sum to 100 percent due to rounding.

Source: Compiled by MedPAC from the 2009 Dialysis Facility Compare database from CMS.

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs that efficient providers incur and how much providers' costs should change in the coming year (2011), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of dialysis providers and changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and providers' costs. Most of our payment adequacy indicators for dialysis services are positive:

sufficient provider capacity, volume growth keeping pace with beneficiary growth, some quality improvements, and sufficient provider access to capital. The Medicare margin for composite rate services and dialysis drugs was 3.2 percent in 2008. We project the Medicare margin for composite rate services and dialysis drugs will be 2.5 percent in 2010.

Beneficiaries' access to care: Indicators continue to be favorable

Our analysis of access indicators shows that beneficiary access to care remains favorable. These indicators include the capacity of providers to meet beneficiary demand, changes in patients' ability to obtain different types of dialysis, whether certain beneficiary groups face problems in obtaining care, and the change in the volume of services furnished to beneficiaries.

Capacity and supply of providers: Capacity has kept pace with beneficiary demand

Growth in the number of dialysis stations and dialysis beneficiaries suggests that provider capacity has kept up with the demand for care during the past decade. Between 1996 and 2008, the number of dialysis beneficiaries and the number of dialysis treatment stations each grew by 5 percent annually (Figure 2D-3).

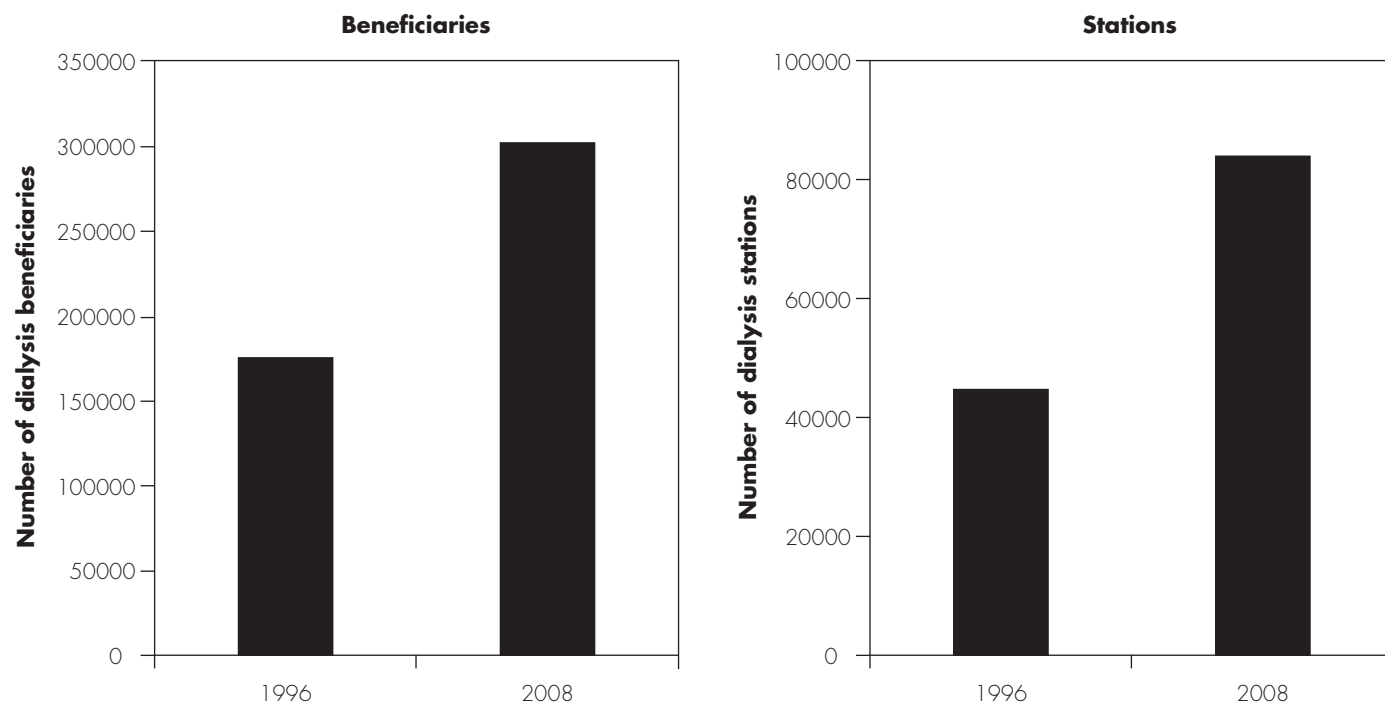
Access to the different types of dialysis has changed little over time

Access to types of dialysis shows little change over time according to data from CMS. Between 1998 and 2009, at least 96 percent of facilities offered in-center hemodialysis and 46 percent offered some type of peritoneal dialysis—continuous cycle peritoneal dialysis or continuous ambulatory peritoneal dialysis. Between 2003 and 2009, the proportion of facilities offering home hemodialysis increased from 12 percent to 21 percent. In addition, industry data suggest that dialysis facilities are beginning to offer in-center nocturnal hemodialysis. For example, across 29 states, DaVita operated 75 facilities with in-center nocturnal programs in 2008 and 114 facilities in 2009 (representing about 8 percent of all its facilities) (DaVita 2009, Mathews 2008).

Most patients receive dialysis in outpatient dialysis facilities. In 2007 (the most current year for which data are available), 92 percent of dialysis patients received hemodialysis in a facility, while 7 percent received peritoneal dialysis (at home), and 1 percent received home hemodialysis (United States Renal Data System 2009).

**FIGURE
2D-3**

Growth in the number of dialysis stations has kept pace with the growth in the number of dialysis beneficiaries



Source: MedPAC analysis of CMS's 2003 and 2008 Dialysis Facility Compare files and claims files.

Between 1997 and 2007, the number of patients receiving hemodialysis in a facility increased by 5 percent per year, while the number of patients treated at home declined by 1 percent per year. However, since 2002, the number of home dialysis patients has increased by 2 percent per year.⁷

Fewer patients overall were dialyzed at home in 2007 than in the mid-1990s. Home dialysis offers several advantages related to quality of life and satisfaction. Compared with in-center hemodialysis, home dialysis is more convenient for patients because they can dialyze on their own schedule. The Commission will continue to monitor the use of home dialysis and is interested in exploring the effect of Medicare's payment and coverage policies on the use of home dialysis. Policy options to consider include using pay for performance to encourage people to dialyze at home. In addition, we intend to monitor the use and effect of educating pre-ESRD beneficiaries about kidney disease, a service that Medicare began to cover in 2010. Predialysis education can help beneficiaries better understand their illness and dialysis modality options and may help delay the need for dialysis.

During the past few years, the use of more frequent hemodialysis (furnished either at home or in center five to seven times per week compared with the typical three times a week regimen) has also modestly increased. Interest in more frequent hemodialysis regimens has grown during the past decade because of studies showing improved outcomes and quality of life. According to CMS's facility survey, between 2004 and 2007, the number of patients receiving more frequent hemodialysis more than tripled to about 1,700 patients.

Most beneficiaries do not face problems in obtaining care when dialysis facilities close

In addition to aggregate supply of dialysis facilities and hemodialysis stations, we also examine whether the types of beneficiaries using new, existing, and recently closed facilities suggest some differences in access to treatment. Specifically, we compared the characteristics of dialysis beneficiaries treated by facilities that were open in 2007 and 2008, that newly opened in 2008, and that closed in 2008.

Compared with facilities that remained open, facilities that closed in 2008 were more likely to be hospital based and nonprofit, which is consistent with long-term trends in supply (as shown in Table 2D-2, p. 123). In addition, facilities that closed had less capacity than those that remained open (averaging 12 dialysis stations compared with 17 dialysis stations). Facility closures in rural areas did not appear to limit providers' capacity. Between 2007 and 2008, the number of dialysis stations increased in rural areas by about 4 percent from about 16,800 stations to 17,400 stations.

Facility closures in 2007 did not appear to have adversely affected beneficiaries who are African American, dually eligible for Medicare and Medicaid, or elderly (beneficiaries 75 years or older). Compared with facilities that remained in business, facilities that closed treated similar proportions of African American beneficiaries (35 percent compared with 38 percent) and dual-eligible beneficiaries (47 percent compared with 48 percent). Facilities that closed and that remained in business had a similar share (24 percent) of elderly beneficiaries. Area-level data from the Bureau of the Census suggest that facility closures are not disproportionately occurring in lower income areas.

Together, these findings suggest that most beneficiaries do not face systematic problems in obtaining care. We will continue to track whether facility closures may disproportionately affect certain beneficiary groups, such as African Americans and dual eligibles.

The mix of beneficiaries by provider type changed little in 2007 and 2008

We examined whether providers stopped treating certain types of beneficiaries by comparing the demographic and clinical characteristics of beneficiaries. Our analysis focused on certain groups, such as African Americans, who are disproportionately affected by renal disease. Our analysis looked at the differences by the following provider types: affiliated with the two largest dialysis organizations, not affiliated with the two largest dialysis organizations, freestanding, and hospital based.

By provider type, the proportion of dialysis beneficiaries in 2008 who were elderly, female, African American, Hispanic, dually eligible for Medicare and Medicaid, or had diabetes or hypertension as the primary cause of ESRD did not vary by more than 1 percentage point between 2007 and 2008. The findings from this analysis

are shown in Figure 2D-A1 in the online appendix to this chapter, available at <http://www.medpac.gov>. For example, in 2008, we found that:

- The proportion of dialysis beneficiaries who were elderly ranged from 23 percent for the two largest dialysis organizations to 28 percent for hospital-based facilities.
- The proportion of dialysis beneficiaries who were female was about 46 percent across all provider types.
- The proportion of dialysis beneficiaries who were African American ranged from 28 percent for hospital-based facilities to 41 percent for the two largest dialysis organizations.

This analysis suggests that providers did not change the mix of patients they cared for in 2007 and 2008.

Volume of services

To assess changes in the volume of dialysis services, we examined trends in the number of dialysis treatments furnished to beneficiaries and in the use of drugs administered during dialysis. For this analysis, we focused on the volume of services furnished by freestanding facilities, as they treat most dialysis beneficiaries. As mentioned earlier, freestanding facilities furnished care to about 90 percent of all dialysis beneficiaries in 2008.

Between 1996 and 2008, dialysis treatments grew at an average annual rate that kept pace with the growth in the number of dialysis beneficiaries. During this time period, the number of dialysis treatments furnished by freestanding facilities grew by 6 percent per year, while the number of dialysis beneficiaries grew by 5 percent per year. These two measures should parallel one another because ESRD beneficiaries require maintenance dialysis to live unless they receive a kidney transplant.

To assess changes in drug volume, we held the drug payment rate constant and looked at the dollar change in the total volume of services for the top 11 dialysis drugs since 2004, when statutory and regulatory provisions changed Medicare's payment for these drugs. We found that, between 2004 and 2008, the total volume of dialysis drugs increased by 3 percent per year, an annual rate of growth slower than in the period that preceded the change in payment method.

In the most recent period (2007–2008), changes in volume varied across the different drugs. During this period,

the aggregate volume of ESAs declined by 4 percent, while the aggregate volume of all other dialysis drugs grew by 6 percent. Consistent with the slowdown in the aggregate use in the 2007–2008 period, the volume of ESAs furnished per treatment also declined. We found, using claims submitted by dialysis facilities, that the dose per treatment of erythropoietin (which accounts for most of the ESA use among dialysis beneficiaries) declined by about 5 percent between 2007 and 2008.

In addition to the MMA payment policy changes, two other factors have contributed to a slowdown in the use of ESAs since 2006:

- In March 2007, the Food and Drug Administration (FDA) included a “black box warning” on ESA drug labels to advise physicians about ESA dosage adjustments: They should maintain the lowest hemoglobin level needed to avoid a blood transfusion. Hemoglobin indicates a patient’s anemia status, measured as grams of hemoglobin per deciliter of blood (g/dL). The FDA added the warning based on evidence from recent studies showing that higher target hemoglobin values were associated with increased mortality and morbidity for patients with chronic kidney disease (who are not on dialysis) and for cancer patients.
- In April 2006, CMS changed its national payment policy for ESAs to promote the efficient use of these drugs. In 2008, the agency modified the 2006 policy based on the recent studies and the FDA warning about the risks associated with large doses of ESA and high hemoglobin levels. The policy change reduces payment for ESAs if providers do not reduce the dosage for a patient whose hemoglobin level exceeds 13 g/dL.⁸

Quality of care: Some measures show progress, others need improvement

CMS data show that the quality of some aspects of dialysis care has remained high. Between 2002 and 2006, the proportion of hemodialysis patients receiving adequate dialysis (a measure of the effectiveness of the dialysis treatment in removing waste products from the body) remained high (Table 2D-3, p. 128). During this period, increasing proportions of both hemodialysis and peritoneal patients had their anemia under control. Nearly all dialysis patients have anemia because diseased kidneys often do not produce sufficient amounts of a hormone

that stimulates red blood cell production, leading to the development of anemia. Providers furnish ESAs to treat anemia, which is a common comorbidity among dialysis patients.

This year, we examined the variation in dialysis adequacy and anemia management across providers using 2007 data from CMS’s Dialysis Facility Compare file. Adequacy of hemodialysis did not vary substantially among facilities. In 2007, the proportion of beneficiaries receiving adequate dialysis ranged from 89 percent for facilities in the 10th percentile to 100 percent for facilities in the 90th percentile.

By contrast, facilities’ anemia management strategies varied, particularly the proportion of beneficiaries maintained at high hemoglobin levels (greater than 12 g/dL). In 2007, the percentage of beneficiaries with high hemoglobin levels ranged from 17 percent for facilities in the 10th percentile to 72 percent for facilities in the 90th percentile. Recent clinical trials have shown that patients with chronic kidney disease who have high hemoglobin levels are at greater risk for death and serious cardiovascular events (Singh et al. 2006). Clinical guidelines recommend that the hemoglobin target should generally be in the range of 11 g/dL to 12 g/dL and that the target should not be greater than 13 g/dL (National Kidney Foundation 2009). There was much less variation in the percentage of beneficiaries whose hemoglobin levels were low (less than 10 g/dL). In 2007, the percentage of beneficiaries with low hemoglobin levels ranged from 1 percent for facilities in the 50th percentile to 5 percent of beneficiaries for facilities in the 90th percentile. Low values of hemoglobin have also been linked to increased risk of morbidity and mortality (Ishani et al. 2008). Our finding about more variation in the proportion of beneficiaries maintained at high hemoglobin levels rather than low levels is not surprising. Under the current payment method, providers have little incentive to control utilization of separately billable dialysis drugs because Medicare pays providers according to the number of units of the drug administered.

Use of the recommended type of vascular access—arteriovenous (AV) fistula—improved between 2002 and 2006. All hemodialysis patients require vascular access—the site on the patient’s body where blood is removed and returned during dialysis. The three basic types of vascular access are AV fistulas, AV grafts, and catheters.⁹ For most patients, clinical guidelines consider an AV fistula a better

**TABLE
2D-3****Dialysis outcomes continue to improve for some measures**

Outcome measure	2002	2003	2004	2005	2006	2007
Percent of in-center hemodialysis patients:						
Receiving adequate dialysis	92%	94%	95%	94%	93%	N/A
With anemia under control	78	81	80	80	82	N/A
Dialyzed with an AV fistula	33	35	39	44	45	N/A
Not malnourished (indicated by albumin levels)	81	81	82	80	81	N/A
Percent of peritoneal dialysis patients:						
Receiving adequate CAPD	71%	70%	73%	72%	75%	N/A
Receiving adequate CCPD	66	65	59	59	64	N/A
With anemia under control	81	83	82	83	85	N/A
Not malnourished	60	63	62	62	63	N/A
Percent of prevalent dialysis patients wait-listed for a kidney:						
All	14%	15%	15%	16%	16%	17%
White	13	14	15	15	15	16
African American	15	16	16	16	17	17
Asian American	23	24	25	25	25	25
Native American	13	14	13	14	14	15
Renal transplant rate per 100 dialysis patient years:						
All	4.9	4.8	4.8	4.8	4.8	4.4
White	6.2	5.9	5.8	5.7	5.5	5.0
African American	3.1	3.1	3.1	3.2	3.2	3.0
Asian American	5.1	5.3	5.5	5.5	6.7	7.7
Native American	3.2	3.3	3.7	3.4	4.5	4.4
Annual mortality rate per 100 dialysis patient years:						
All	21.7	21.4	21.0	20.6	20.1	19.3
White	23.6	23.2	22.7	22.2	21.7	20.9
African American	19.2	19.2	19.0	18.7	18.1	17.3
Other	16.9	16.4	15.9	15.5	14.9	14.1
Inpatient admission rate per dialysis patient:						
All	2.0	2.0	2.0	2.0	2.0	1.9
White	2.0	2.0	2.1	2.1	2.0	1.9
African American	2.0	2.0	2.1	2.1	2.0	1.9
Asian American	1.5	1.4	1.4	1.5	1.4	1.4
Native American	2.0	2.0	2.0	1.9	1.9	1.8

Note: N/A (not available), AV (arteriovenous), CAPD (continuous ambulatory peritoneal dialysis), CCPD (continuous cycler-assisted peritoneal dialysis). Other includes Asian Americans and Native Americans. Data on dialysis adequacy, use of fistulas, and anemia management represent percent of patients meeting CMS's clinical performance measures. United States Renal Data System (USRDS) adjusts data by age, gender, race, and primary diagnosis of end-stage renal disease (ESRD).

Source: Compiled by MedPAC from 2003–2007 Annual Reports for ESRD Clinical Performance Measures Project from CMS and USRDS 2009.

type of vascular access than an AV graft or a catheter. Because they are native vessels, AV fistulas last longer and have fewer complications, such as infections and clotting, than other types of vascular access (National Institute of Diabetes and Digestive and Kidney Diseases 2008). CMS

is leading a national quality initiative—Fistula First—with a goal of having fistulas placed in at least half of new hemodialysis patients and having a minimum of 66 percent of patients who continue dialysis using a fistula.

In the 2002–2007 period, overall adjusted mortality rates decreased but remained high among dialysis patients. By race, dialysis patients included in the other category (which includes Asian Americans and Native Americans) had the lowest adjusted mortality rate; this finding is a function of the lower mortality rate among Asian Americans. In contrast to the pattern seen in the general population, adjusted mortality was lower among African American dialysis patients than among whites (17.3 vs. 20.9 per 100 patient years, respectively in 2007) (United States Renal Data System 2009). The presence of cardiovascular disease, which is the leading cause of death in dialysis patients, may explain some of the paradoxical association of race with mortality in dialysis patients. Researchers have reported that, compared with African American dialysis patients, white dialysis patients are at increased risk of developing atherosclerotic cardiovascular disease (even after adjusting for traditional cardiovascular and dialysis-related risk factors) and that this increased risk may contribute to the higher risk of mortality in whites than in African Americans (Parekh et al. 2005).

Other measures suggest that improvements in dialysis quality are still needed. We looked at several measures that examine access to kidney transplantation because it is widely believed that kidney transplantation is the best treatment option for individuals with ESRD. Transplantation reduces mortality and improves patients' quality of life (Eggers 1988, Kasiske et al. 2000, Laupacis et al. 1996, Ojo et al. 1994). The proportion of dialysis patients accepted on the kidney transplant waiting list showed little change over time (Table 2D-3).

We also examined rates of kidney transplantation in the 2002–2007 period. Between 2002 and 2006, rates of kidney transplantation remained relatively steady (Table 2D-3) (United States Renal Data System 2009). However, between 2006 and 2007, the rate of kidney transplantation as well as the total number of procedures declined.¹⁰ Between 2006 and 2007, all racial groups except Asian Americans experienced a decrease in the rate of kidney transplantation. This recent one-year decline is partly due to a decrease in kidney donations from living donors. Between 2006 and 2007, kidney transplants from living donors declined by 6.1 percent, while transplants from deceased donors declined by 1.3 percent (Health Resources and Services Administration 2008). The decline in the number of transplant procedures may also be partly linked to a small drop in the incidence of ESRD. Between 2006 and 2007, ESRD incidence (adjusted for age, gender, race, ethnicity, and primary diagnosis) dropped from

361 to 354 per million population, the first decline in the incidence rate since 1995 (United States Renal Data System 2009). Some researchers have linked the decline in ESRD incidence to a decline in the incidence of ESRD among individuals with diabetes and have suggested that improved treatment and care may have contributed to this decline (Burrows et al. 2010). The text box (pp. 130–131) summarizes some issues about the distribution of kidney transplantation across the ESRD population that the Commission monitors.

Another measure that suggests that dialysis quality improvements are still needed is the proportion of dialysis patients with low albumin levels, which has remained unchanged over time. Patients with lower serum albumin levels, a measure of increased risk of malnutrition, are at increased mortality risk.

Overall rates of hospitalization remained steady at about two admissions per dialysis patient per year. By race, the hospitalization rate is lowest among Asian Americans (United States Renal Data System 2009). In addition to hospitalizations, we examined inpatient readmission rates for dialysis beneficiaries, which can be indicators of poor care or missed opportunities to better coordinate care (Medicare Payment Advisory Commission 2007). We found, using 2007 hospital claims data for dialysis beneficiaries, that a significant proportion (32 percent) of hospitalized dialysis beneficiaries were readmitted to a hospital within 30 days. This readmission rate did not vary substantially by race or sex. For example, 32 percent of whites and 33 percent of African Americans who were hospitalized were readmitted within 30 days. At 32 percent, the overall readmission rate for dialysis beneficiaries in 2007 remained virtually unimproved from 2005, when 33 percent of hospitalized dialysis beneficiaries were readmitted within 30 days.

Providers' access to capital: Growth trends suggest access is adequate

Providers need access to capital to improve their equipment and open new facilities so they can accommodate the growing number of patients requiring dialysis. Between 2008 and 2009, the largest dialysis organizations and smaller chains showed similar growth rates, which suggests that both small and large providers have adequate access to capital. During this period, the number of dialysis stations operated by the two largest dialysis organizations (Fresenius Medical Care North America and DaVita) grew by 6 percent; in comparison, the number of dialysis stations operated by smaller

Distribution of kidney transplantation

This text box describes some of the trends and factors affecting access to kidney transplantation. Kidney transplantation is a life-saving medical procedure for which the demand far exceeds the supply of the resource (i.e., transplantable organs). Transplantation improves clinical outcomes compared with dialysis. When no living related kidney donor is available, many end-stage renal disease (ESRD) patients must rely on the limited supply of cadaveric donor organs. Although the principle of equity is emphasized in the distribution of this limited resource, several studies have documented that kidney transplantation rates differ by patients' demographic and socioeconomic characteristics.

Access to kidney transplantation varies by race. Data from the United States Renal Data System (USRDS) show that in 2007:

- White ESRD patients accounted for 62 percent of ESRD patients and received 66 percent of transplants.

- African Americans accounted for 32 percent of ESRD patients and received 25 percent of transplants.
- Asian Americans and Native Americans together accounted for 6 percent of the ESRD population and accounted for 9 percent of transplants.

However, in the recent five-year period, there has been some change in transplantation rates across racial groups. Between 2002 and 2007, rates of transplantation increased for some minority groups—Asian Americans and Native Americans—while the rate for African Americans remained relatively constant (Table 2D-3, p. 128). During this period, the rates of transplantation for whites declined.

The factors affecting access to kidney transplantation are complex. Unequal transplantation rates result in part from differences in the clinical appropriateness of patients as candidates for transplantation. Some patients are not able to receive a transplant because of the presence of medical contraindications—such as a recent

(continued next page)

freestanding chains grew by an average of 4 percent between 2008 and 2009.

The two large dialysis organizations appear to have adequate access to capital despite the economic downturn that began in the fall of 2008, as demonstrated by their ability to make large purchases and the willingness of private investors to fund their acquisitions. For example, Fresenius Medical Care North America advanced its vertical integration by acquiring an information technology company that has developed a nephrology-specific electronic health record that links care furnished by the physician, dialysis facility, hospital, pharmacy, laboratory, and vascular access center. In 2009, this large dialysis organization opened a national retail pharmacy catering to renal patients. In addition, Fresenius Medical Care North America developed a system (KidneyTel®) that combines home telehealth monitoring services with

an integrated care management program tailored to renal patients. In 2009, DaVita repurchased 744,400 shares of common stock for \$32 million and announced a \$5 million investment in underserved communities across the country (PRNewswire 2009, TheStreet.com 2009). Smaller dialysis chains also appear to have adequate access to capital. For example, Renal Advantage, Inc., has teamed with Welsh, Carson, Anderson & Stowe for capital and guidance for new center development.

The fact that an increasing proportion of dialysis facilities are freestanding, owned by publicly traded companies, chain operated (i.e., operated under common ownership), and for profit suggests that the dialysis industry is an attractive business to for-profit providers and that there are efficiencies and economies of scale in providing dialysis care. The two largest dialysis organizations have enjoyed mostly positive ratings from investor analysts

Distribution of kidney transplantation

history of substance abuse, the presence of cancer, a serious infection, or significant cardiovascular disease. Lower rates of renal transplantation, particularly among African American patients, also partly reflect the immunologic (including blood type and antibodies in the blood) matching process of donors to recipients. Reducing the number of biological mismatches improves the outcomes of kidney transplantation.

Differences in access may also stem from differences in transplants from live donors. In 2007, transplants from live donors accounted for about 37 percent of procedures, while kidney transplants from deceased donors accounted for 63 percent of procedures (Health Resources and Services Administration 2008). By race, whites accounted for 75 percent of live donor procedures compared with 14 percent for African Americans and 12 percent for Asian Americans and Native Americans (United States Renal Data System 2009). Researchers have noted that there are fewer living donors among African Americans, increasing their dependence on cadaver organs (Young and Gaston 2000).

Differences in kidney transplantation rates may also reflect patient and provider factors. Possible

patient-level factors include lack of knowledge about transplantation and concerns about surgery and adverse effects of medication. Provider-level factors that may affect access to kidney transplantation include clinicians' subconscious bias and transplant center characteristics.

However, even after controlling for some of these demographic and clinical characteristics, differences in access to kidney transplantation persisted. Researchers have examined the sequential steps that lead to transplantation (a patient being medically suitable and possibly interested in a transplant, being definitely interested in transplantation, completing the pretransplant workup, and moving up the waiting list to eventual transplantation) and have found that access to cadaveric kidney transplantation is significantly related to patients' race, sex, and income. For example, compared with whites, men, and higher income patients, African Americans, women, and lower income patients were less likely to complete the pretransplant workup (Alexander and Sehgal 1998). The Commission intends to continue to analyze the trends in kidney transplantation and research on access to this procedure. ■

in 2009, who have generally viewed dialysis providers' fundamentals—including the aging of the U.S. population, the higher incidence of diabetes, and recurring demand—and low sensitivity to economic cycles as favorable from an economic perspective. In addition, investor analysts remain favorable about the dialysis sector because of its record of solid growth rates and available “free cash flow,” the cash flow available for distribution among an organization's securities holders. Standard & Poor's recently upgraded DaVita's stock ranking to “buy” from “hold” based on the stock's potential for future performance. Concerning DaVita's prospects, Deutsche Bank is “very comfortable with the fundamental outlook into 2010, as we think DaVita has strong visibility into volume and pricing growth, while underlying cost trends remain under control” (Deutsche Bank 2009). Fresenius's chief financial officer noted that the company “secures the lowest cost of total capital including equity” (Burger 2009).

Outside capital investment might be discouraged if investor analysts are uncertain about the impact of a new payment method on a sector's financial outlook. Since the release of the CMS proposed rule, investor analysts remain positive about the long-term economic prospects for the dialysis sector. For example, Standard & Poor's views the proposed bundled dialysis payment rates (included in the proposed rule) “as manageable and removing some anxiety surrounding the [dialysis] group” (Standard & Poor's 2009). Wells Fargo Securities generally views the “transition to a bundled payment scheme as a long term positive for the industry” (Wells Fargo Securities 2009).

Medicare payments and providers' costs

Each year, we assess freestanding providers' costs and the relationship between Medicare's payments and freestanding providers' costs by considering whether current costs approximate what efficient providers

are expected to spend on delivering high-quality care. Two indicators of the appropriateness of current costs are: (1) trends in the growth of cost per treatment for composite rate services between 2003 and 2008 and (2) the distribution of facilities' per treatment costs in 2008, adjusted for a facility's wage index and average case-mix index. Medicare margins also illuminate the relationship between Medicare payments and providers' Medicare-allowable costs. We examined margins for freestanding facilities for 2008, the latest year for which cost reports and claims data are available. We also include our projection for the Medicare margin in 2010.

Appropriateness of current costs

Because the composite rate is set prospectively, providers have an incentive to restrain their costs for composite rate services. In contrast, because Medicare pays for dialysis drugs on a per unit basis, providers have an incentive to negotiate lower drug prices, but they have little incentive to restrain drug volume. At issue is whether aggregate dialysis costs provide a reasonable representation of costs that efficient providers would incur in furnishing high-quality care.

Between 2003 and 2008, the cost per treatment for composite rate services rose by 3.2 percent per year. The variation in cost growth across freestanding dialysis facilities shows that some facilities were able to hold their cost growth well below others. For example, per treatment costs increased by 1.6 percent per year for facilities in the 25th percentile of cost growth, compared with 5.1 percent for facilities in the 75th quartile.

The growth in cost per treatment during that period partly stems from rising general and administrative costs, which increased by 6 percent per year and accounted for about 30 percent of the total cost per treatment in 2008. General and administrative costs include expenses associated with legal and accounting services, recordkeeping and data-processing tasks, telephone and other utilities, and malpractice premiums. By contrast, between 2003 and 2008, capital and labor costs (associated with direct patient care) increased by 3 percent per year; other direct medical costs decreased by 1 percent per year. In 2008, capital, labor, and other direct medical costs accounted for 20 percent, 41 percent, and 11 percent, respectively, of the total cost per treatment.

The distribution of the cost per treatment in 2008, adjusted for each facility's wage index and average case mix,

suggests that some facilities are able to furnish care at a lower cost than others. While the average adjusted cost per treatment was \$161, cost per treatment varied for facilities in the 10th percentile, the 25th percentile, the 50th percentile (median), the 75th percentile, and the 90th percentile of costs at \$127, \$140, \$158, \$178, and \$200, respectively. Previous Commission research suggests that the two largest dialysis organizations and facilities that provided more dialysis treatments exhibited lower costs relative to their counterparts (Medicare Payment Advisory Commission 2008).

The Medicare margin for freestanding providers

The Commission assesses current payments and costs for dialysis services for freestanding dialysis facilities by comparing Medicare's payments for composite rate services and dialysis drugs with providers' Medicare-allowable costs. The latest and most complete data available on payments and costs are from 2008.

For 2008, we estimate that the aggregate Medicare margin for composite rate services and dialysis drugs was 3.2 percent. The distribution of margins in 2008 shows wide variation in performance among freestanding facilities. One-quarter of facilities had margins at or below -5.5 percent, but half the facilities had Medicare margins of at least 4.1 percent, and one-quarter of facilities had Medicare margins of at least 12.9 percent.

The aggregate 2008 margin dropped from the 2006 and 2007 margins, which we estimated to be 5.9 percent and 4.8 percent, respectively (Medicare Payment Advisory Commission 2009). Changes in per treatment cost and payment can partly explain this direction. Between 2007 and 2008, the cost per treatment for composite rate services was greater than the update to the composite rate. In 2008, CMS updated the add-on to the composite rate from 14.9 percent to 15.5 percent of the composite rate, which amounted to an increase of about 0.5 percent to the composite rate (from \$152.23 to \$153.03 per dialysis treatment). The decline in the volume of ESAs in 2008 has also affected the Medicare margin. In addition, CMS's payment policy was modified in 2006; the policy change reduces payment for ESAs if providers do not reduce the dosage for a patient with a hemoglobin level that exceeds 13 g/dL. Between 2007 and 2008, the decline in the average ESA payment per treatment was greater than the decline in the average ESA cost per treatment.

As in earlier years, urban facilities had higher margins than rural facilities (3.9 percent vs. -0.3 percent,

respectively), and facilities affiliated with the two largest dialysis organizations tended to have higher margins than other freestanding facilities (4.0 percent vs. 1.6 percent, respectively) (Table 2D-4). However, compared with 2007, the margin gap between urban and rural facilities widened, while the gap between the two largest dialysis organizations and their counterparts narrowed (data not shown).

The gap in the Medicare margin widened between urban and rural facilities between 2007 and 2008 in part because: (1) the wage index floor declined and (2) the volume of ESAs declined for the two largest dialysis organizations, which account for a greater proportion of facilities in rural areas than other freestanding facilities.¹¹

Between 2007 and 2008, although the add-on payment to the composite rate increased across all facilities (by 0.5 percent), the average composite rate payment per treatment increased more for urban facilities than for rural facilities. Changes to the ESRD wage index partly account for this finding. The ESRD wage index is developed from wage and employment data obtained from the Medicare hospital cost reports.¹² Beginning in calendar year 2006, CMS adopted geographic designations based on core-based statistical areas and began reducing the wage index floor. Before 2006, CMS used wage-adjusted designations based on metropolitan statistical areas. To mitigate the impact of these changes, CMS transitioned the changes as follows:

- In 2006, the first year of the transition, CMS implemented a 75/25 blend. The wage index floor was reduced from 0.9 to 0.85.
- In 2007, CMS implemented a 50/50 blend. The wage index floor was reduced to 0.80.
- In 2008, CMS implemented a 25/75 blend. The wage index floor was reduced to 0.75.

CMS estimated that the wage index changes between 2007 and 2008 would decrease total payments to rural facilities by -0.6 percent and increase total payments to urban facilities by 0.1 percent (Centers for Medicare & Medicaid Services 2007). Including the effect of the update to the add-on payment on the composite rate, CMS estimated total composite rate payments would not change for rural facilities and would increase by 0.7 percent for urban facilities in 2008.

**TABLE
2D-4**

Medicare margin in 2008 varies by type of freestanding provider

Provider type	Percent of spending	Medicare margin
All	100%	3.2%
Two largest dialysis organizations	68	4.0
All others	32	1.6
Urban	83	3.9
Rural	17	-0.3

Source: Compiled by MedPAC from 2008 cost report and outpatient claims submitted by facilities to CMS.

The Commission is concerned that the gap in the Medicare margin between urban and rural facilities widened between 2007 and 2008. We will continue to monitor the adequacy of Medicare's payments for rural and urban facilities in the upcoming years. Some rural facilities are expected to benefit from the low-volume adjustment that will be included in the new ESRD PPS scheduled to begin in 2011.

On the basis of 2008 payment and cost data, we project that the 2010 aggregate margin will be 2.5 percent. This estimate reflects the 1 percent composite rate update in MIPPA, effective January 1, 2009, and January 1, 2010. This projection for 2010 does not take into account the 2 percent reduction in total spending that MIPPA mandated to begin in 2011 under the new dialysis payment method. We did not include the 2 percent reduction in our projection because CMS has not yet finalized the regulatory provisions to implement the new payment method. In addition, providers' response to the new payment method is unknown. Including ESRD drugs now separately paid for under Part B in the new payment bundle may lead to better management of drug therapy, which may lead to improvements in the efficiency of care.

How should Medicare payments change in 2011?

CMS measures price inflation for the goods and services associated with the composite rate. CMS's latest forecast of this index for calendar year 2011 is 2.0 percent. In considering an appropriate update for each sector, the Commission also takes into account improvements in

productivity. Competitive markets demand continual improvements in productivity from workers and firms. These workers and firms pay the taxes used to finance Medicare. Medicare's payment systems should exert the same pressure on providers of health services. The Commission begins its deliberations with the expectation that Medicare should benefit from productivity gains in the economy at large (the 10-year average of productivity gains in the general economy is currently 1.3 percent). This factor links Medicare's expectations for efficiency to the gains achieved by the firms and workers who pay taxes that fund Medicare. The Commission's assessment of dialysis providers' historic responsiveness to changes in payments, along with the other components of the update framework discussed above, suggests that it is reasonable to apply a productivity adjustment to the composite rate update to encourage dialysis providers to produce a unit of service as efficiently as possible while maintaining quality.

Update recommendation

The evidence on payment adequacy suggests that a moderate update of the composite rate is in order. Therefore, the Commission recommends that the Congress should update the composite rate by the projected rate of increase in the ESRD market basket less the adjustment for productivity growth for calendar year 2011. Under the current estimate of the ESRD market basket, this recommendation would increase the composite rate by 0.7 percent in 2011. (Note that CMS revises its market basket

projections on a quarterly basis.) By comparison, under current law, MIPPA mandates that the Secretary update the composite rate by the ESRD market basket less 1 percent.

RECOMMENDATION 2D

The Congress should update the composite rate by the projected rate of increase in the end-stage renal disease market basket less the adjustment for productivity growth for calendar year 2011.

RATIONALE 2D

Most of our indicators of payment adequacy are positive, including beneficiaries' access to care, volume of services, quality of care, and access to capital. The projected 2010 aggregate Medicare margin is 2.5 percent.

IMPLICATIONS 2D

Spending

- This recommendation would decrease federal program spending relative to current law by between \$50 million and \$250 million in 2011 and by less than \$1 billion over five years.

Beneficiary and provider

- We do not anticipate any negative effects on beneficiary access to care. This recommendation is not expected to affect providers' willingness or ability to serve beneficiaries. ■

Endnotes

- 1 Individuals with a diagnosis of ESRD who are not eligible for Medicare coverage either do not qualify for fully or currently insured status under Social Security or have not filed an application to become eligible.
- 2 In addition to Medicare eligibles, new dialysis patients include those who are not eligible for Medicare either because they do not meet the eligibility criteria (explained in Endnote 1) or because they have not yet applied for Medicare coverage.
- 3 In this chapter we use the term “dialysis beneficiaries” to refer to those individuals who are covered under Medicare and “dialysis patients” to refer to all individuals requiring dialysis, including individuals covered under Medicare and individuals not covered under Medicare. In 2007, we found, using claims data, that about 330,000 dialysis beneficiaries were covered under Medicare. During the same year, according to data from CMS’s facility survey, dialysis facilities furnished care to 358,000 dialysis patients.
- 4 Before the MMA, Medicare paid freestanding facilities a statutory rate for erythropoietin and 95 percent of the average wholesale price or a statutory rate for all other dialysis drugs.
- 5 Comorbidities include: alcohol and drug dependence, cardiac arrest, pericarditis, human immunodeficiency virus–acquired immunodeficiency syndrome (HIV/AIDS), hepatitis B, specified infection (septicemia, bacterial pneumonia, and opportunistic infections), gastrointestinal tract bleeding, hereditary hemolytic or sickle cell anemia, cancer, myelodysplastic syndrome, and monoclonal gammopathy.
- 6 The comorbidity adjustment is based on the presence of HIV/AIDS, septicemia, diabetes, and cardiac arrest.
- 7 Between 2002 and 2007, use of peritoneal dialysis increased from 25,396 patients to 26,364 patients, while use of home hemodialysis increased from 1,758 patients to 2,999 patients.
- 8 The current FDA label recommends that patients’ hemoglobin levels range between 10 g/dL and 12 g/dL. National Kidney Foundation guidelines currently recommend that dialysis patients’ hemoglobin levels range between 11 g/dL and 12 g/dL (National Kidney Foundation 2009).
- 9 Physicians create an AV fistula by joining an artery to a vein under the patient’s skin (frequently in the forearm). A few months are usually needed to allow the AV fistula to properly develop before it can be used during dialysis. Physicians may implant an AV graft for certain patients (including those with small or weak veins) who are not candidates for an AV fistula. Like AV fistulas, physicians implant AV grafts under the skin, usually in the patient’s forearm. AV grafts use a soft plastic tube to join an artery and a vein. Compared with AV fistulas, AV grafts can be used sooner after placement, often within two to three weeks. Catheters placed in the patient’s neck, chest, or leg are used as a temporary access when a patient needs dialysis immediately and is waiting for an AV fistula or AV graft to mature. They are also used when an AV fistula or graft fails.
- 10 The number of kidney transplants declined from 18,056 in 2006 to 17,513 in 2007.
- 11 USRDS data show that the two largest dialysis organizations furnish, on average, a higher volume of dialysis drugs than other freestanding facilities (United States Renal Data System 2008).
- 12 The ESRD wage index values are calculated without regard to geographic reclassifications and utilize prefloor hospital data that are unadjusted for occupational mix.

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2E

SECTION

Hospice

R E C O M M E N D A T I O N S

- 2E** The Congress should update the payment rates for hospice for fiscal year 2011 by the projected rate of increase in the hospital market basket index less the Commission's adjustment for productivity growth.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

.....

(For additional recommendations on improving the hospice payment system, see text box on pp. 146–147.)

2E

SECTION

Hospice

Section summary

The Medicare hospice benefit covers palliative and support services for beneficiaries with a life expectancy of six months or less who choose to enroll in the benefit. In 2008, more than 1 million Medicare beneficiaries received hospice services from more than 3,300 providers and Medicare expenditures exceeded \$11 billion.

Assessment of payment adequacy

The indicators of payment adequacy for hospices, discussed below, are generally positive. We believe hospice providers can operate within the current payment system with a moderate update. We therefore recommend that the Congress update payment rates for hospice services by the hospital market basket index, less the Commission's adjustment for productivity growth.

Beneficiaries' access to care—Hospice use among Medicare decedents has grown substantially in recent years, suggesting greater awareness of and access to hospice services. Hospice use increased across all demographic and beneficiary characteristics examined. Despite this growth, use remained lower among racial and ethnic minorities.

- ***Capacity and supply of providers***—The supply of hospices grew substantially (47 percent) from 2000 to 2008. For-profit providers accounted almost entirely for the increase in the number of hospices.

In this section

- Are Medicare payments adequate in 2010?
.....
- How should Medicare payments change in 2011?
.....

- ***Volume of services***—Medicare spending on hospice services nearly quadrupled between 2000 and 2008, reflecting more beneficiaries enrolling in hospice and longer lengths of stay.

Quality of care—We do not have sufficient evidence to assess quality, as information on quality of care is very limited. Efforts completed or under way might provide a pathway for further development of quality measures.

Providers' access to capital—After the economy wide credit crisis last year, access to capital in the health care sector appears to be normalizing. Hospices are not as capital intensive as some other provider types because they do not require extensive physical infrastructure. Many are too small to attract interest from capital markets. Evidence suggests that access to capital is favorable for large publicly traded hospice companies, for-profit freestanding hospices, and hospital-based and home-health-based hospices. Access to capital for nonprofit freestanding hospices is difficult to assess.

Medicare payments and providers' costs—The aggregate Medicare margin, which is an indicator of the adequacy of Medicare payments relative to costs, was 5.9 percent in 2007. We project that the aggregate margin will decline to 4.6 percent in 2010. These margin estimates exclude the costs of bereavement services (about 1.5 percent of total costs), which are not reimbursable by Medicare. ■

Background

Medicare began offering a hospice benefit in 1983, pursuant to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The benefit covers palliative and support services for terminally ill beneficiaries who have a life expectancy of six months or less if the terminal illness follows its normal course. A broad set of services are included such as nursing care; physician services; counseling and social worker services; home health aide (also referred to as hospice aide) and homemaker services; short-term inpatient care (including respite care); drugs and biologicals for symptom control; home medical equipment; physical, occupational, and speech therapy; bereavement services for the patient's family; and other services for palliation of the terminal condition. In 2008, more than 1 million Medicare beneficiaries received hospice services and Medicare expenditures exceeded \$11 billion.

Beneficiaries must “elect” the Medicare hospice benefit; in so doing, they agree to forgo Medicare coverage for curative treatment for the terminal illness. Medicare continues to cover items and services unrelated to the terminal illness. A written plan of care must be established and maintained by the attending physician, the medical director, or another hospice physician and by an interdisciplinary group for each person admitted to a hospice program. The plan of care must identify services to be provided (including management of discomfort and symptom relief) and describe the scope and frequency of services needed to meet the patient's and family's needs.

Beneficiaries elect hospice for defined benefit periods. Under the current policy, the first hospice benefit period is 90 days. For a beneficiary to initially elect hospice, two physicians (the beneficiary's attending physician and a hospice physician) must certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course. If the patient's terminal illness continues to engender the likelihood of death within 6 months, the patient can be recertified for another 90 days. After the second 90-day period, the patient can be recertified for an unlimited number of 60-day periods, as long as he or she remains eligible.¹ For recertifications, only the hospice physician has to certify that the beneficiary's life expectancy is 6 months or less. Beneficiaries can switch from one hospice to another once during a hospice election period and can disenroll from hospice at any time.

In recent years, Medicare spending for hospice care increased dramatically, and the CMS Office of the Actuary

(OACT) projects continued robust growth. Spending has almost quadrupled since 2000, and OACT projects that hospice spending will almost double over the next 10 years. This spending increase is driven by greater numbers of beneficiaries electing hospice and longer hospice stays.

Medicare payment for hospice

The Medicare program pays a daily rate to hospice providers for each day a beneficiary is enrolled in hospice. The hospice assumes all financial risk for costs and services associated with care related to the patient's terminal illness. The hospice provider receives payment for every day a patient is enrolled, regardless of whether the hospice visited the patient each day. This payment design is intended to encompass not only the cost of visits but also other costs a hospice incurs related to on-call services, care planning, drugs, medical equipment, and supplies related to the patient's terminal condition, patient transportation between hospice care sites, and other less frequently used services.

Payments are made according to a fee schedule that has base payment amounts for four categories of care: routine home care, continuous home care, inpatient respite care, and general inpatient care (Table 2E-1, p. 144). A hospice is paid the routine home care rate for each day the patient is enrolled in hospice, unless the hospice provides continuous home care, inpatient respite care, or general inpatient care. Routine home care accounts for more than 95 percent of hospice care days. The Medicare payment rates for hospice are updated by the inpatient hospital market basket. The payment methodology and the base rates for hospice care have not been recalibrated since initiation of the benefit in 1983.

The daily hospice payment rates are adjusted to account for differences in wage rates among markets. Each category of care's base rate has a labor share, which is adjusted by the hospice wage index for the location where care is furnished and the result is added to the nonlabor portion. From 1983 to 1997, Medicare adjusted hospice payments with a 1983 wage index based on 1981 Bureau of Labor Statistics data. In fiscal year 1998, after a negotiated rule-making process, CMS began using the most current hospital wage index to adjust hospice payments and applied a budget-neutrality adjustment each year to make aggregate payments equivalent to what they would have been under the 1983 wage index. This budget-neutrality adjustment increased Medicare payments to hospices by about 4 percent. In fiscal year 2010, CMS

**TABLE
2E-1****Medicare hospice payment categories and rates, FY 2010**

Category	Description	Base payment rate
Routine home care	Home care provided on a typical day	\$143 per day
Continuous home care	Home care provided during periods of patient crisis	\$34.75 per hour
Inpatient respite care	Inpatient care for a short period to provide respite for primary caregiver	\$148 per day
General inpatient care	Inpatient care to treat symptoms that cannot be managed in another setting	\$636 per day

Note: FY (fiscal year). Payment for continuous home care (CHC) is an hourly rate for care delivered during periods of crisis if care is provided in the home for 8 or more hours within a 24-hour period beginning at midnight. A nurse must deliver more than half of the hours of this care to qualify for CHC-level payment. The minimum daily payment rate at the CHC level is \$278 per day (8 hours at \$34.75 per hour); maximum daily payment at the CHC level is \$834 per day (24 hours at \$34.75 per hour).

Source: CMS Manual System Pub 100-04 Medicare Claims Processing, Transmittal 1796, "Update to the Hospice Payment Rates, Hospice Cap, Hospice Wage Index and the Hospice Pricer for FY 2010."

began phasing out the budget-neutrality adjustment over seven years. It is reduced by 10 percent in 2010 (a 0.4 percent reduction) and will be reduced an additional 15 percent (a 0.6 percent reduction) each subsequent year, until the budget-neutrality adjustment is eliminated entirely in fiscal year 2016.

Beneficiary cost sharing for hospice services is minimal. Hospices may charge a 5 percent coinsurance (not to exceed \$5) for each prescription furnished outside the inpatient setting. For inpatient respite care, beneficiaries may be charged 5 percent of Medicare's respite care payment per day.

The Commission's analyses of the hospice benefit in our June 2008 and March 2009 reports found that Medicare's hospice payment system contains incentives that make very long stays in hospice more profitable for providers than short stays, which may have led to inappropriate utilization of the benefit among some hospices (Medicare Payment Advisory Commission 2008, Medicare Payment Advisory Commission 2009). We also found that the benefit lacks adequate administrative and other controls to check the incentives for long stays in hospice and that CMS lacks data vital to effective management of the benefit. In March 2009, the Commission made recommendations to reform the hospice payment system, ensure greater accountability in use of the hospice benefit, and improve data collection and accuracy (see text box, p. 146–147). Since the Commission made its recommendation to reform the hospice payment system, additional data have become available on hospice visit

patterns across episodes of care. These data confirm our prior findings and further support the need for payment system reform. A discussion of our analysis of these newly available data sources can be found in the online appendix to this chapter, available at <http://www.medpac.gov>.

Medicare hospice payment limits ("caps")

The Medicare hospice benefit was designed to give beneficiaries a choice in their end-of-life care, allowing them to forgo intensive conventional treatment (often in inpatient settings) and die at home and with family according to their personal preferences. The inclusion of the Medicare hospice benefit in TEFRA was based in large part on the premise that the new benefit would be a less costly alternative to conventional end-of-life care (Government Accountability Office 2004, Hoyer 2007). To achieve this outcome, when the Congress established the hospice benefit it included two limitations, or "caps," on payments to hospices.

The first cap limits the number of days of inpatient care a hospice may provide to not more than 20 percent of its total Medicare patient care days. This cap is rarely exceeded, and when it is, any inpatient days provided in excess of the cap are reimbursed at the routine home care payment rate.

The second, more visible cap limits the aggregate Medicare payments an individual hospice can receive. It was implemented at the outset of the hospice benefit to ensure that Medicare payments did not exceed the cost of conventional care for patients at the end of life. Under

the cap, if a hospice's total payments divided by its total number of beneficiaries exceed the cap amount (\$21,410 in 2007), it must repay the excess to the program.² This cap is not applied individually to the payments received for each beneficiary but to the average of payments across all Medicare patients admitted to the hospice in the cap year. The number of hospices exceeding the average annual payment cap has historically been low, but we have found that increases in the number of hospices and increases in very long stays have resulted in more hospices exceeding the cap. With rapid growth in Medicare hospice spending in recent years, the hospice cap is the only significant fiscal constraint on the growth of program expenditures for hospice care (Hoyer 2007).

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs efficient providers incur and how much providers' costs should change in the coming year (2011), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of hospice providers and changes over time in the volume of services provided, providers' access to capital, and the relationship between Medicare's payments and providers' costs. Overall, the Medicare payment adequacy indicators for hospice providers are positive. Unlike our assessments for other providers, we could not use quality of care as a payment adequacy indicator, as information on hospice quality is generally not available.

Beneficiaries' access to care: Use of hospice continues to increase

Hospice use among Medicare decedents has grown substantially in recent years, suggesting increased awareness of and access to hospice services. In 2008, about 40 percent of Medicare decedents used hospice, up from 23 percent in 2000 (Table 2E-2, p. 148). From 2007 to 2008, the proportion of Medicare decedents using hospice grew from 39 percent to 40 percent. While hospice use varied by beneficiary characteristics (i.e., fee-for-service (FFS) and managed care, dual and nondual eligibles, age, gender, race), it increased substantially across all beneficiary groups between 2000 and 2007 and more modestly between 2007 and 2008.

Use of hospice is slightly more frequent among beneficiaries in Medicare Advantage than FFS, although differences in hospice use rates have narrowed over time. In 2000, 22 percent of Medicare FFS decedents used hospice compared with 31 percent of Medicare Advantage decedents. By 2008, these use rates rose to 39 percent of Medicare FFS decedents and 44 percent of Medicare Advantage decedents.

Hospice use also varies by other beneficiary characteristics. In 2008, a smaller proportion of Medicare decedents who are dually eligible for Medicare and Medicaid used hospice (36 percent) than nondual eligibles (42 percent). Hospice use is more common among older beneficiaries, with use rates ranging from 25 percent (among Medicare decedents under age 65) to 45 percent (among Medicare decedents age 85 or older) in 2008. Female beneficiaries are also more likely than male beneficiaries to use hospice, which partly reflects the longer average life span among women than men and greater hospice use among older beneficiaries.

Differences also exist in hospice use by racial and ethnic groups. As of 2008, hospice use was highest among white Medicare decedents (42 percent) followed by Hispanic decedents (33 percent), African American decedents (31 percent), Native North American decedents (30 percent), and Asian American decedents (24 percent). Hospice use grew substantially among all these groups between 2000 and 2008. Despite this growth, differences in hospice use across racial and ethnic groups persist but are not fully understood. Researchers examining this issue have cited a number of possible factors, such as cultural or religious beliefs, preferences for end-of-life care, socioeconomic factors, disparities in access to care, and mistrust of the medical system (Cohen 2008, Crawley 2000).

One driver of increased hospice use over the last decade has been growth in hospice election by patients with noncancer diagnoses, as there has been increased recognition that hospice can appropriately care for patients with noncancer diagnoses. Patients with noncancer diagnoses accounted for 69 percent of all hospice users in 2008, up from 47 percent in 1998 (Centers for Medicare & Medicaid Services 2009). This greater share of hospice patients with noncancer diagnoses reflects substantial growth in the enrollment of such patients. For example, between 1998 and 2008, the number of hospice users with debility increased from just over 8,500 to nearly 107,000, and the number with Alzheimer's disease or non-

March 2009 Commission recommendations on hospice

The Commission's analyses have shown that the current structure of the hospice payment system makes long stays in hospice more profitable for providers than short stays. These analyses have found that hospice visits tend to be more frequent at the beginning of a hospice episode and at the end of the episode near the time of a patient's death and less frequent in the intervening period. But the Medicare payment rate, which is constant over the course of the episode, does not take into account the different levels of effort that occur during different periods within an episode. As a result, long hospice stays, which generally have a lower average visit intensity over the course of an episode, are more profitable than short stays. The incentives in the current hospice payment system for long stays may have led to inappropriate utilization of the benefit among some providers. To address these problems, the Commission made the following recommendations in March 2009.

The Congress should direct the Secretary to change the Medicare payment system for hospice to:

- have relatively higher payments per day at the beginning of the episode and relatively lower payments per day as the length of the episode increases,
- include a relatively higher payment for the costs associated with patient death at the end of the episode, and
- implement the payment system changes in 2013, with a brief transitional period.

These payment system changes should be implemented in a budget-neutral manner in the first year.

Compared with the current hospice payment system, this payment model would result in a much stronger relationship between Medicare payments and hospices' level of effort in providing care throughout an episode and promote stays of a length consistent with hospice as an end-of-life benefit.

The Congress should direct the Secretary to:

- require that a hospice physician or advanced practice nurse visit the patient to determine continued eligibility prior to the 180th-day recertification and each subsequent recertification and attest that such visits took place,
- require that certifications and recertifications include a brief narrative describing the clinical basis for the patient's prognosis, and
- require that all stays in excess of 180 days be medically reviewed for hospices for which stays exceeding 180 days make up 40 percent or more of their total cases.

These steps would help to instill greater accountability in use of the hospice benefit by promoting more physician engagement in the hospice certification and recertification process. The recommendation would also bring more scrutiny to the Medicare claims of hospices with aberrant utilization patterns. CMS has

(continued next page)

Alzheimer's dementia grew from about 28,000 to 174,000 (Centers for Medicare & Medicaid Services 2009).

Capacity and supply of providers: Supply of hospices continues to grow, driven by growth in for-profit providers

The number of hospice providers has grown substantially in recent years. From 2001 to 2008, the total number of

hospices increased from just over 2,300 to nearly 3,400, an increase of 47 percent (Table 2E-3, p. 149). The most rapid growth occurred between 2003 and 2007, with an average annual growth rate of 8 percent. Growth continued between 2007 and 2008 at a rate of 4 percent. The slower growth rate in 2008 may have been due in part to CMS guidance to state survey and certification agencies in 2007 that placed surveys of hospices applying to be

March 2009 Commission recommendations on hospice (cont.)

adopted one part of this recommendation, requiring that all certifications and recertifications include a brief physician narrative explaining the clinical basis for the prognosis.

The Secretary should direct the Office of Inspector General to investigate:

- **the prevalence of financial relationships between hospices and long-term care facilities such as nursing facilities and assisted living facilities that may represent a conflict of interest and influence admissions to hospice,**
- **differences in patterns of nursing home referrals to hospice,**
- **the appropriateness of enrollment practices for hospices with unusual utilization patterns (e.g., high frequency of very long stays, very short stays, or enrollment of patients discharged from other hospices), and**
- **the appropriateness of hospice marketing materials and other admissions practices and potential correlations between length of stay and deficiencies in marketing or admissions practices.**

Questions have been raised about the appropriateness of certain practices among some hospices, including relationships between hospices and long-term care

facilities and enrollment and marketing practices. A comprehensive review of these relationships and practices by the Office of Inspector General would provide greater understanding of the nature of these relationships and practices and the degree to which inappropriate behavior may be occurring.

The Secretary should collect additional data on hospice care and improve the quality of all data collected to facilitate the management of the hospice benefit. Additional data could be collected from claims as a condition of payment and from hospice cost reports.

Medicare has historically collected minimal information on hospices' services and costs. This recommendation would improve the data on services and costs, which would help facilitate reform and oversight of the benefit. For example, the Commission indicated that hospice claims should contain information on the type and duration of visits provided to better understand patterns of care among patients. Also, hospice cost reports should include additional information on revenues and be subject to additional reviews to ensure that they serve as accurate fiscal documents. Beginning January 2010, CMS expanded its data-reporting requirements for hospice claims consistent with this recommendation, to include the length of visits as well as additional types of visits such as physical, speech, and occupational therapist visits. ■

new Medicare providers (and surveys of certain other providers) in the lowest tier of their workload priorities.³

For-profit hospices account for most of the growth in the number of hospices. From 2001 to 2008, for-profit hospices grew 128 percent, compared with 1 percent growth in nonprofit hospices and 25 percent growth in hospices with government or other ownership. As of 2008, about 52 percent of hospices were for profit, 35 percent were nonprofit, and 13 percent were government or other ownership structures.

Growth in the number of hospices occurred predominantly among freestanding providers. Between 2001 and 2008, freestanding hospices grew 87 percent, compared with a 9 percent increase in home-health-based hospices and a 2 percent decrease in hospital-based hospices. Skilled nursing facility (SNF)-based hospices grew from 12 providers to 19 providers over this period.⁴ As of 2008, 66 percent of hospices were freestanding, 17 percent were home health based, 16 percent were hospital based, and fewer than 1 percent were SNF based.

**TABLE
2E-2****Use of hospice continues to increase****Percent of Medicare decedents who used hospice**

	2000	2005	2006	2007	2008	Average annual percentage point change 2000–2007	Percentage point change 2007–2008
All beneficiaries	22.9%	34.2%	37.0%	38.9%	40.1%	2.3%	1.2%
FFS beneficiaries	21.5	33.4	36.2	38.0	39.2	2.4	1.2
MA beneficiaries	30.9	40.3	41.3	42.9	43.9	1.7	1.0
Dual eligibles	17.5	29.8	32.5	34.5	35.8	2.4	1.3
Nondual eligibles	24.5	35.7	38.4	40.3	41.5	2.3	1.2
Age							
<65	17.0	22.4	23.7	24.5	25.0	1.1	0.5
65–74	25.4	32.5	34.2	35.6	36.2	1.5	0.6
75–84	24.2	35.4	38.1	40.1	41.1	2.3	1.0
85+	21.4	37.2	41.0	43.5	45.3	3.2	1.8
Race/ethnicity							
White	23.8	35.6	38.5	40.5	41.8	2.4	1.3
African American	17.0	26.1	28.2	29.9	30.7	1.8	0.8
Hispanic	21.1	29.2	31.2	32.6	32.9	1.6	0.3
Asian American	15.2	20.5	21.9	22.9	24.4	1.1	1.5
Native North American	13.0	26.3	27.6	28.8	29.7	2.3	0.9
Gender							
Male	22.4	31.8	34.1	35.9	36.7	1.9	0.8
Female	23.3	36.3	39.4	41.5	43.0	2.6	1.5

Note: FFS (fee-for-service), MA (Medicare Advantage).

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

The increase in the supply of hospices occurred in both rural and urban areas. Not shown in Table 2E-3, between 2001 and 2008, the number of urban hospices grew about 60 percent and the number of rural hospices grew about 25 percent. As of 2008, about 31 percent of hospices are rural and 69 percent are urban.

Growth in the number of hospices by state between 2001 and 2008 varied, with some states experiencing extremely robust growth (more than doubling in Alaska, Utah, Louisiana, Mississippi, Nevada, Texas, and South Carolina) and others experiencing no growth (South Dakota, West Virginia, and the District of Columbia) or very slight declines in the number of hospice providers (Maryland, New York, and North Dakota). Four states with the highest share of hospices reaching the cap in 2007 (Mississippi, Alabama, Arizona, and Oklahoma) had

above average growth in the number of hospices between 2001 and 2008, with increases in the number of providers ranging from about 62 percent to 160 percent during this time.

Recognizing that the raw number of hospices may not be the best measure of provider capacity, we examined the relationship between the supply of hospices and the rate of hospice use among Medicare decedents across states. As shown in Figure 2E-1, there appears to be no relationship between the supply of hospices (as measured by number of hospices per 1,000 Medicare decedents) and the rate of hospice use (as measured by the percent of Medicare decedents that used hospice) across states. This finding suggests that the number of hospices alone is not necessarily a good indicator of beneficiary access

**TABLE
2E-3**

The total number of hospices rose substantially between 2001 and 2008, driven by growth in for-profit hospices

Category	2001	2002	2003	2004	2005	2006	2007	2008	Aggregate percent change, 2001–2008
All hospices	2,303	2,349	2,464	2,643	2,870	3,073	3,258	3,389	47%
For profit	765	819	922	1,091	1,282	1,464	1,637	1,748	128
Nonprofit	1,184	1,172	1,173	1,171	1,181	1,184	1,188	1,197	1
Government/other	354	358	369	381	407	425	433	444	25
Freestanding	1,196	1,251	1,361	1,541	1,737	1,922	2,098	2,233	87
Home health based	541	530	532	538	566	583	592	592	9
Hospital based	554	553	557	551	553	553	551	545	–2
SNF based	12	15	14	13	14	15	17	19	58

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of data from CMS Providing Data Quickly system, <https://pdq.cms.hhs.gov>, accessed November 20, 2009.

to care, and trends in these statistics should be interpreted cautiously.

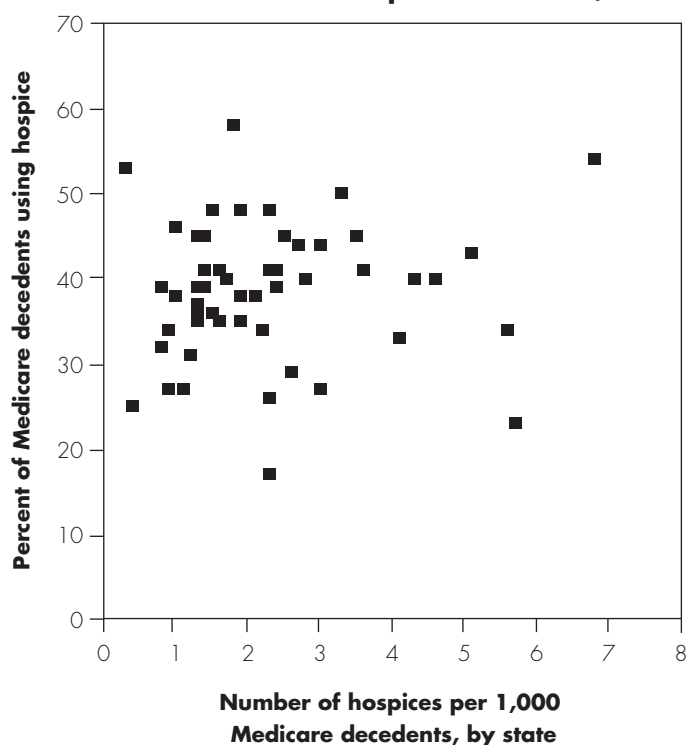
Volume of services: The number of hospice users and average length of stay have increased substantially

The number of Medicare beneficiaries receiving hospice services doubled between 2000 and 2008, surpassing 1 million by 2008 (Table 2E-4, p. 150). The number of hospice users increased rapidly between 2000 and 2007, at an average rate of 10 percent per year, and continued to grow in 2008 at a somewhat slower but still significant rate of 5.5 percent.

The average length of stay also increased substantially over the last decade. Medicare decedents in 2008 who used hospice had an average length of stay of 83 days (over the course of their lifetime), compared with an average of 54 days for their counterparts in 2000. The increased average length of stay reflects in large part an increase in very long hospice stays, while short stays remained virtually unchanged (Figure 2E-2, p. 150). Between 2000 and 2008, hospice length of stay at the 90th percentile grew substantially, increasing from 141 days to 235 days. In contrast, the median length of stay during this period held steady at 17 days and the 25th percentile decreased slightly from 6 days to 5 days. While the increase in very long hospice stays is a concern, so too is the persistence of very short stays. With very short

**FIGURE
2E-1**

Hospice enrollment rates are unrelated to the number of hospices in a state, 2008



Note: Each data point in the chart represents one state.

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS, and data from CMS Providing Data Quickly system, <http://pdq.cms.hhs.gov>.

**TABLE
2E-4****The volume of hospice use has increased substantially**

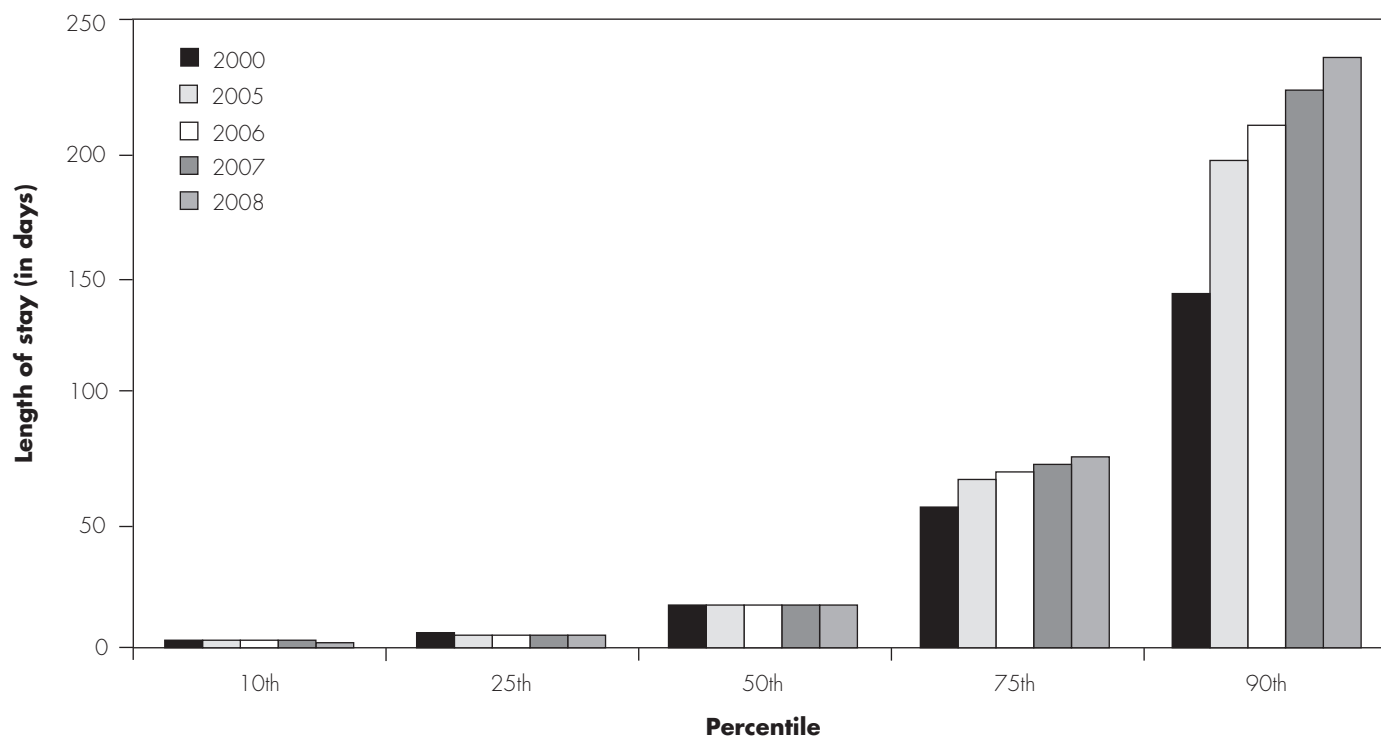
Category	2000	2007	2008	Average annual percent change 2000–2007	Percent change 2007–2008
Number of hospice users	513,000	1,000,000	1,055,000	10.0%	5.5%
Total spending (in billions)	\$2.9	\$10.3	\$11.2	19.8	8.7
Average length of stay among decedents (in days)	54	80	83	5.8	3.8

Note: Length of stay reflects the total number of days the decedent hospice user was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database from CMS, and the 100 percent hospice claims standard analytical file from CMS.

hospice stays, the patient does not fully benefit from all that hospice has to offer. As discussed in our March 2009 report, an expert panel that we convened of hospice industry representatives indicated that very short stays in hospice largely stem from factors unrelated to the

Medicare hospice payment system, such as reluctance among physicians, patients, and their families to recognize a terminal situation and the financial incentives of acute care providers to continue treating a terminal patient (Medicare Payment Advisory Commission 2009).

**FIGURE
2E-2****Very long hospice stays have grown longer while short stays remained virtually unchanged, 2000–2008**

Note: Data reflect hospice length of stay for Medicare decedents who used hospice at the time of death or prior to death. Length of stay reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS.

**TABLE
2E-5****Hospices that exceeded Medicare's annual payment cap, 2002-2007**

Category	2002	2003	2004	2005	2006	2007
Percent of hospices exceeding the cap	2.6%	4.1%	5.8%	7.8%	9.4%	10.4%
Average payments over the cap per hospice exceeding the cap (in thousands)	\$470	\$664	\$749	\$755	\$731	\$612
Payments over the cap as percent of overall Medicare hospice spending	0.6%	1.2%	1.7%	2.2%	2.4%	2.0%
Total Medicare hospice spending (in billions)	\$4.4	\$5.4	\$6.6	\$7.7	\$8.8	\$10.4

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data, Medicare hospice cost reports, Provider of Services file data from CMS, and CMS Providing Data Quickly system. Data on total spending for each fiscal year from the CMS Office of the Actuary.

As discussed in our June 2008 report, the increase in long hospice stays appears to be partly the result of the enrollment of more patients with noncancer diagnoses, for whom it may be harder to predict life expectancy. However, a changing diagnosis profile of patients does not fully explain the growth in very long stays. Some providers, particularly providers that exceeded the hospice cap, appeared to have a higher prevalence of long-stay patients across all diagnoses, suggesting some patient selection may be at work.

The percent of hospices exceeding the cap, while growing each year between 2002 and 2007, appears to be leveling off and remained relatively small at an estimated 10 percent in 2007 (Table 2E-5). Medicare payments over the cap attributable to these hospices represented 2 percent of total hospice payments in 2007. While the number of above-cap hospices increased in 2007, the total dollars of cap overpayments fell slightly from \$211 million in 2006 to \$208 million in 2007 (not shown in the table). As a result, between 2006 and 2007, the average cap overpayment per above-cap hospice declined from about \$731,000 to \$612,000.

As discussed in our June 2008 report, above-cap hospices are more likely to be for-profit, freestanding facilities and to have smaller patient loads than below-cap hospices (Medicare Payment Advisory Commission 2008). They treat a larger share of patients with Alzheimer's disease and other neurological conditions than hospices that do not exceed the cap. Most importantly, hospice providers exceeding the cap exhibit significantly longer lengths of

stay than hospices remaining under the cap, even when taking patient mix into account. For example, the share of hospice users in 2007 with cancer who had stays exceeding 180 days for above-cap hospices (19 percent) was double that for below-cap hospices (9 percent) (Table 2E-6). Between 44 percent and 50 percent of above-cap hospices' patients with neurological conditions, heart or circulatory conditions, or chronic obstructive pulmonary disease had stays exceeding 180 days, compared with 18

**TABLE
2E-6****Percent of hospice users with stays exceeding 180 days, by diagnosis, for above-cap and below-cap hospices, 2007**

Diagnosis	Hospices	
	Above cap	Below cap
All	41%	18%
Cancer	19	9
Neurological conditions	50	29
Heart/circulatory	44	18
Debility	38	22
COPD	47	24
Other	46	20

Note: COPD (chronic obstructive pulmonary disease). Data reflect the percent of hospice users in 2007 whose hospice length of stay was beyond 180 days.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data from CMS.

**TABLE
2E-7****Hospice live discharges as a percent of all discharges, by diagnosis, for above-cap and below-cap hospices, 2007**

Diagnosis	Hospices	
	Above cap	Below cap
All	46%	16%
Cancer	24	10
Neurological conditions	41	18
Heart/circulatory	55	15
Debility	47	20
COPD	54	19
Other	54	21

Note: COPD (chronic obstructive pulmonary disease).

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data and the denominator file from CMS.

percent to 29 percent of patients with these conditions in below-cap hospices.

Hospices that exceed the cap also have substantially higher rates of live discharges than hospices that do not exceed the cap (Table 2E-7). In 2007, nearly half (46 percent) of all discharges by above-cap hospices in 2007 were live discharges, compared with 16 percent in below-cap hospices. Among patients with similar diagnoses, above-cap hospices also have substantially higher rates of live discharges than below-cap hospices. For example, 55 percent of patients with heart or circulatory conditions were discharged alive in above-cap hospices, compared with 15 percent in below-cap hospices. While hospice is intended to be end-of-life care, the occurrence of some live discharges is not unexpected. A patient's disease may not follow the expected course (e.g., cancer may go into remission) or a patient may decide to revoke the hospice election and return to conventional treatment. However, what is notable about the live discharges by above-cap hospices is how much more frequently they occur compared with below-cap hospices. Above-cap hospices' substantially higher live discharge rates, combined with the longer lengths of stay, raise questions about whether above-cap hospices are admitting patients before they meet the hospice eligibility criteria. The Commission previously recommended that the Office of Inspector

General (OIG) examine the appropriateness of enrollment practices among hospices with unusual utilization patterns. Very high rates of live discharges among some hospices may be an area that could benefit from further examination by the OIG.

Critics of the cap contend that it may force many hospices to go out of business or to limit access to care for noncancer patients or racial and ethnic minorities. We have evaluated this claim and find no evidence to suggest that the growing number of providers exceeding the Medicare limit on payments has affected patients' access to hospice care.

The data in Table 2E-8 show that the Medicare hospice cap is unrelated to hospice use rates across states. For example, Florida, Colorado, Iowa, Oregon, and Delaware have high rates of hospice use among Medicare decedents and few above-cap hospices, which demonstrates that exceeding the cap is not required to achieve high rates of hospice use. Furthermore, hospice use rates vary substantially across states that have a high share of above-cap hospices. On the one hand, Mississippi, the state with the highest share of above-cap hospices (47 percent) has a below average hospice use rate (35 percent of Medicare decedents), whereas Arizona and Utah have both high rates of hospice use and above-cap hospices. Overall, these data suggest that the Medicare hospice cap is unrelated to hospice use rates across states.

Similarly, our analysis of states with the highest hospice use by minority populations found that the cap is unrelated to hospice use by minority populations. States with the highest rates of hospice use by minorities varied in the share of hospices exceeding the cap. The three states with the greatest rates of hospice use among minorities had a very low share of above-cap hospices.

Quality of care: Information on hospice quality is very limited

Publicly reported information on hospice quality is generally not available. The absence of such information reflects the fact that hospice quality measures remain under development. Numerous studies have indicated that hospice improves the quality of remaining life for patients who elect it (Kane et al. 1984, Miller et al. 2003). But developing standardized empirical quality measures that can be used for program administration—either to compare provider performance or to adjust payments under future pay-for-performance programs—presents

unique challenges. The set of hospice characteristics that are correlated with quality is not clear-cut and structural, process, and outcomes measures are scarce. Measures that rely on family perceptions of care are more common, but establishing the validity of those characteristics may be difficult because of their subjective nature. Measures that rely on hospice patient satisfaction exist but are less common and apply only to a subset of patients who are able to provide feedback on care near the end of life. Despite these challenges, there have been a number of efforts to develop hospice quality measures and to collect data. Building on one or more of these efforts or the lessons learned from them may be a possible pathway toward developing quality measures for program administration and public reporting.

Conceptual frameworks for measuring quality

There have been a number of efforts to conceptually define elements of hospice care or end-of-life care that are indicative of high quality. In 1997, the Institute of Medicine (IOM) identified a number of elements that it considered intrinsic to health care systems (including hospices) engaged in providing care at the end of life (Institute of Medicine 1997), including providing or arranging for symptom prevention and relief; attention to emotional and spiritual needs and goals; care for the patient and family as a unit; sensitive communication, goal setting, and advance planning; interdisciplinary care; and services appropriate to the various settings and ways people die. In 2004, the Agency for Healthcare Research and Quality (AHRQ) sponsored an intensive literature review on end-of-life care (including hospices) that focused on relevant patient, family, and provider factors as well as processes and interventions that could be used to identify components of high-quality care (Lorenz et al. 2004).⁵ In 2006, the National Quality Forum (NQF) issued a national framework and preferred practices in palliative and end-of-life care (National Quality Forum 2006). NQF identified a list of 38 preferred practices covering the following eight areas: structures and processes of care; physical aspects of care; psychological and psychiatric aspects of care; social aspects of care; spiritual, religious, and existential aspects of care; cultural aspects of care; care of the imminently dying patient; and ethical and legal aspects of care.

Family and patient surveys

Patient and family assessments can suggest the presence or absence of quality in the hospice care a patient receives.

**TABLE
2E-8**

**The hospice cap is unrelated
to the use of hospice services
across states, 2007**

Ten states with highest hospice use rates	Percent of:	
	Decedents using hospice	Hospices exceeding the cap
Arizona	57%	32%
Utah	52	21
Florida	52	5
Colorado	48	2
Iowa	48	1
Oregon	47	2
Delaware	46	0
New Mexico	44	9
Texas	44	10
Michigan	44	3

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, 100 percent hospice claims standard analytical file data, Medicare hospice cost reports from CMS, and the CMS Providing Data Quickly system.

National Hospice and Palliative Care Organization

surveys One of the most widely used assessments is the Family Evaluation of Hospice Care (FEHC), a survey developed and fielded by the National Hospice and Palliative Care Organization (NHPCO), with major analytic and substantive input from researchers at Brown University (Connor et al. 2004, Connor et al. 2005). The data from this survey are not publicly available. The FEHC surveys recipients on how well the hospice attended to family support and information needs, how well the hospice assisted in coordinating care, and the family's perception of how well the hospice cared for the patient overall and met the patient's needs for pain management, assistance with respiratory difficulty, and emotional support. NHPCO also developed the End Results Outcome Measures (EROM) care tool that includes 3 measures: whether the patient's pain was brought to a comfortable level within 48 hours of hospice admission (based on the patient's self-report) and whether unwanted hospitalizations and cardiopulmonary resuscitation were avoided. In October 2006, NQF endorsed national voluntary consensus standards related to the quality of care

for symptom management and end-of-life care for patients with cancer. Among the measures endorsed was NHPCO's FEHC and one measure from the NHPCO EROM on pain control. NHPCO also fields a bereavement survey of family members and is developing a patient evaluation of hospice and palliative care.

National Association for Home Care and Hospice

surveys The National Association for Home Care and Hospice (NAHC) has an abbreviated version of a family satisfaction survey as well as a patient survey. The data from these surveys are not publicly available. Each survey is a single page, and each asks the respondent to rate the hospice's performance by agreeing or disagreeing with statements characterizing how well the hospice met the patient's pain and symptom management and other needs, its communications with the patient and the family, and the hospice staff's personal interactions with the patient. Participating hospices provide the surveys to the patient (two weeks after admission) or the family (two months after the patient's death); respondents return the surveys directly to NAHC, which compiles the data and reports hospice-specific results to each participating hospice. Recently, NAHC has also fielded a bereavement survey.

Benefits and challenges of surveys Family and patient surveys represent potentially useful tools for hospices to identify areas for improvement within their operations. Measuring hospice patient satisfaction, however, is a uniquely difficult endeavor. Because of the physical and emotional effects of a patient's illness, some patients may be unable or limited in their capacity to provide feedback on the hospice care they receive. Efforts to design patient satisfaction measures must confront these and other challenges and do so in a way that is sensitive to the individual circumstances each patient faces near the end of life. Given that much of the hospice benefit consists of emotional, spiritual, and psychological supports, family perceptions may be appropriate indicators of the quality of hospice care. However, there are limitations to the potential use of these types of surveys by the Medicare program in assessing the quality of hospice care. First, the surveys are voluntary, and although the organizations encourage their members to participate in the survey effort, members are not required to do so. Therefore, data obtained from such surveys may not come from a representative sample of hospices. Second, family surveys measure hospice care through the perceptions of family members or persons otherwise closely related to the

hospice patient. The answers of family members may not necessarily reflect the patient's actual experience, particularly if the patient was unable to communicate well. A third limitation of hospice performance assessments by family members is the tendency for respondents to give positive ratings; thus, such assessments may not adequately differentiate performance among hospices. For example, results from the 2005 FEHC suggest that well over 90 percent of survey respondents rated their family member's care as "excellent" or "very good" (Rhodes et al. 2007). These scores may reflect the nature of family members' perceptions—that they greatly appreciate hospice involvement at the end of the patient's life and may not have a frame of reference from which to differentiate various levels of quality of hospice care.

CMS initiatives on hospice quality

CMS does not currently require hospices to report quality data. However, the agency does have initiatives under way related to hospice quality. The Medicare conditions of participation require all hospices to have a quality assessment and performance improvement (QAPI) program. CMS also recently completed a project to identify potential hospice quality measures and is now conducting a follow-up project to test a subset of those measures in a small number of hospices.

QAPI Program As part of revisions to the hospice conditions of participation finalized in 2008, CMS now requires each hospice to have a QAPI program. CMS does not require hospice QAPI programs to focus on specific quality measures but rather allows each hospice to choose quality measures to monitor based on standards of care; findings in the current literature; local, regional, or national quality measurement programs; or quality measures used by other provider types. Hospices are required to collect performance data on measurable quality indicators and demonstrate that they continuously monitor these data and use them on an ongoing basis to improve the quality of their care. QAPI data are not publicly reported. CMS refrained from establishing national quality benchmarks, indicating that "more time is needed to test, refine, and collect further data related to any specific measure before we could establish a nationwide benchmark" (Centers for Medicare & Medicaid Services 2008). However, CMS pointed to a number of resources that might assist hospices in developing QAPI programs (such as NQF's consensus standards for end-of-life care of cancer patients, NQF's preferred practices for palliative

and end-of-life care, the PEACE project, AHRQ's review of end-of-life care and outcomes, NHPCO's initiative to help hospices develop QAPI programs, and the Brown University toolkit of instruments to measure end-of-life care).

CMS testing of quality measures In 2006, CMS began the PEACE project⁶ with the Carolinas Center for Medical Excellence, Medicare's quality improvement organization for North and South Carolina, to identify quality measures for end-of-life care and collect and analyze the instruments available to gather data on those measures. The PEACE project devised a list of 34 potential hospice quality measures. The project has concluded, and CMS is now conducting a follow-up project to test 12 of the quality measures identified by the PEACE project in 7 hospices in New York. The 12 measures fall into a range of areas: structure and process of care, care for physical symptoms and psychosocial symptoms, social and cultural aspects of care, care of the imminently dying, ethical and legal aspects of care, and adverse events. Examples of the quality measures being tested are the percentage of patients with certain symptoms such as pain, nausea, or anxiety who receive treatment or experience symptom relief within a specified time period. Most of the quality measures would rely on information reported in the patient's medical record. One of the 12 quality measures (percentage of families reporting that the hospice attended to family needs for information about medication, treatment, and symptoms) would rely on information from the patient's family. The project is scheduled to be completed in November 2010 and is being conducted in accord with NQF standards.

Public reporting of hospice quality data

In recent years, the American Hospice Foundation has been developing a hospice "report card" that would provide a vehicle for public reporting of quality and other data to allow members of the public to compare hospices' performance in terms of quality. The hospice report card would use many of the measures included in NHPCO's FEHC and one measure from NHPCO's EROM on pain control. It would also report administrative data, such as visits per week and hospice and staff accreditation, and include graphic displays that compare hospices in the same market and the average performance on these quality measures for all hospices in a state.

Florida has a report card on hospice quality for consumers that utilizes data from NHPCO's FEHC (Florida Agency

for Healthcare Administration 2009). The report card, however, does not differentiate well among hospices.⁷ Across most hospices and most quality measures, the ratings are uniformly 5 stars (highest rating), with only a few cases of 4 stars.

Providers' access to capital: Access to capital appears to be adequate

Following economy wide disruptions in the credit markets in 2008, capital markets in the health care sector appear to be normalizing, as evidenced by high volumes of municipal health care issuances in January 2010 (Cain Brothers 2010). Hospices in general are not as capital intensive as some other provider types because they do not require extensive physical infrastructure (although some hospices have chosen to build their own inpatient units, which requires significant capital). Many hospices are too small to attract interest from capital markets.

Some freestanding hospices are part of large publicly traded chain providers. Recent financial reports for these hospices have been favorable. One large publicly traded hospice chain recently reported strong cash flow and margins and limited debt. Another publicly traded hospice company reported stronger than expected earnings and good cash position. Overall, access to capital for these providers is likely to be solid.

Less information is available on access to capital for smaller freestanding for-profit providers; however, the continued influx of for-profit providers into the market suggests that capital remains accessible. Access to capital for nonprofit freestanding hospices is difficult to assess, although we plan to continue to explore whether there may be sources of information that could provide insight on access to capital for these providers. Hospital-based hospices have access to capital through their parent provider. Problems in the credit markets have eased somewhat from last year and access to capital for hospitals seems to be operating in a more normal manner. Home-health-based hospices also have access to capital through their parent providers, which appear to have adequate access to capital.

Medicare payments and providers' costs

As part of the update framework, we assess the relationship between Medicare payments and providers' costs by considering whether current costs approximate what efficient providers are expected to spend on

**TABLE
2E-9****Hospice costs per day vary
by type of provider, 2007**

	Average	Percentile		
		25th	50th	75th
All hospices	\$134	\$103	\$126	\$159
Freestanding	128	100	121	150
Home health based	143	105	131	165
Hospital based	168	112	143	187
For profit	121	94	117	147
Nonprofit	148	115	138	173
Above cap	104	85	102	124
Below cap	139	107	130	163
Urban	137	105	129	162
Rural	119	99	120	151

Note: Data reflect aggregate cost per day for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care). Data are not adjusted for differences in the case mix or wages across hospices.

Source: MedPAC analysis of Medicare hospice cost reports and Medicare Provider of Services data from CMS.

delivering high-quality care. Medicare margins illuminate the relationship between Medicare payments and providers' costs. We examined margins through the 2007 cost-reporting year, the latest period for which both cost report data and claims data are available. An important driver of margins is providers' costs. To better understand the variation in margins across providers, we have also examined the variation in costs per day across providers.

Hospice costs

Hospice costs per day vary significantly by type of provider. This variation is one reason we observe differences in hospice margins across provider types in our subsequent margin analyses. In 2007, hospice costs per day were \$134 on average across all hospice providers (Table 2E-9).⁸ Freestanding hospices had lower costs per day than home-health-based hospices and hospital-based hospices. For-profit, above-cap, and rural hospices also had lower costs per day than their counterparts.

The differences in costs per day among freestanding, home-health-based, and hospital-based hospices largely reflect differences in average length of stay and indirect costs. Our analysis of the Medicare cost report data indicates that, across all types of hospices, those with longer average lengths of stay have lower costs per day. Freestanding hospices have longer lengths of stay than provider-based hospices, which accounts for some, but not all, of the difference in costs per day. Another substantial factor is the higher level of indirect costs among provider-based hospices. In 2007, indirect costs made up 33 percent of total costs for freestanding hospices compared with 39 percent of total costs for home-health-based hospices and 41 percent of total costs for hospital-based hospices. The higher indirect costs among provider-based hospices suggest that their costs may be inflated because of the allocation of overhead costs from the parent provider.

Hospice margins

From 2001 to 2007, the aggregate hospice Medicare margin was favorable, oscillating from roughly 4.5 percent to 6.5 percent (Table 2E-10).⁹ As of 2007, the aggregate hospice Medicare margin was 5.9 percent, down slightly from 6.4 percent in 2006. Margins varied widely across individual hospice providers. In 2007, the Medicare margin was -13.7 percent at the 25th percentile, 5.3 percent at the 50th percentile, and 20.1 percent at the 75th percentile. Our estimates of Medicare margins from 2001 to 2007 exclude overpayments to above-cap hospices and are calculated based on Medicare allowable, reimbursable costs consistent with our approach in other Medicare sectors.¹⁰

We excluded nonreimbursable bereavement costs from our margin calculations. The statute requires that hospices offer bereavement services to family members of their deceased Medicare patients. However, the statute prohibits Medicare payment for bereavement services (Section 1814(i)(1)(A) of the Social Security Act). We estimate that including bereavement costs would reduce our 2007 aggregate Medicare margin estimate by 1.5 percentage points. Across most hospice types, bereavement costs are similar. Some differences, however, are observed between nonprofit and for-profit providers, with bereavement costs being about 1.9 percent and 1.0 percent of total costs, respectively. We also excluded nonreimbursable volunteer program costs from our margin calculations, which equal 0.3 percent of total costs.¹¹ Hospices are required to use volunteers to provide administrative or patient care

**TABLE
2E-10****Hospice Medicare margins, 2001–2007**

Category	2001	2002	2003	2004	2005	2006	2007
All	4.4%	5.5%	6.6%	5.0%	4.5%	6.4%	5.9%
Freestanding	9.1	9.2	11.0	8.3	7.2	9.7	8.8
Home health based	0.2	1.9	3.9	3.1	3.0	3.8	2.3
Hospital based	-11.6	-9.1	-13.7	-11.6	-9.1	-12.7	-10.0
SNF based	N/A	N/A	N/A	N/A	N/A	N/A	N/A
For profit	13.7	14.9	15.8	11.7	9.8	12.0	10.5
Nonprofit	0.1	0.2	1.1	0.3	0.9	1.5	1.8
Government*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Urban	4.7	6.1	7.5	5.9	5.1	7.1	6.5
Rural	2.7	0.5	0.3	-2.5	0.0	0.6	1.2
Patient volume (quintile)							
Lowest	-4.8	-6.3	-2.2	-6.2	-6.6	-5.5	-8.2
Second	-3.6	-3.8	-4.3	-1.1	-2.1	0.5	1.1
Third	-1.0	3.9	2.1	1.0	1.9	2.4	3.1
Fourth	4.9	4.6	3.6	2.7	4.2	5.8	6.3
Highest	6.1	7.2	9.6	7.2	5.9	8.1	7.1
Below cap	N/A	5.2	6.8	5.6	5.0	7.1	6.2
Above cap	N/A	14.3	3.5	-3.4	-0.8	0.4	2.6
Above cap (including cap overpayments)	N/A	30.9	23.9	18.9	20.7	20.8	20.4

Note: SNF (skilled nursing facility), N/A (not available). Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Margins are calculated based on Medicare allowable, reimbursable costs. There are very few SNF-based providers.

*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

services equal to at least 5 percent of patient care time furnished by paid staff.

Freestanding, for-profit, and urban hospices have higher margins than their counterparts. In 2007, freestanding hospices had an aggregate Medicare margin of 8.8 percent compared with home-health-based hospices at 2.3 percent and hospital-based hospices at -10.0 percent. The aggregate Medicare margin was higher among for-profit hospices (10.5 percent) than nonprofit hospices (1.8 percent). Among nonprofit hospices, differences were substantial in the margins for freestanding and provider-based hospices. Freestanding nonprofit hospices had an aggregate Medicare margin of 5.6 percent compared with 1.5 percent for home-health-based hospices and -9.9 percent for hospital-based hospices in 2007 (data not shown). In 2007, the aggregate Medicare margin was higher among urban hospices (6.5

percent) than for rural hospices (1.2 percent). Overall, hospices' margins vary by size of provider; hospices with more patients have higher margins on average. Hospices with longer lengths of stay also have higher margins (Medicare Payment Advisory Commission 2009).

Differences in margins across freestanding, home-health-based, and hospital-based hospices are in part due to differences in indirect costs, which are higher for provider-based hospices and are likely inflated because of the allocation of overhead costs from the parent provider. If home-health-based and hospital-based hospices had indirect cost structures similar to those for freestanding hospices, we estimate that their margins would be 6 to 10 percentage points higher and the industry wide aggregate Medicare margin would be as much as 2 percentage points higher. We intend to continue to examine the differences in the levels of indirect costs across providers and consider

whether issues with the allocation of overhead from the parent provider warrant the exclusion of provider-based hospices from our margin calculations.

Projecting margins for 2010

To project the aggregate Medicare margin for 2010, we model the policy changes that went into effect between 2007 (the year of our most recent margin estimate) and 2010 as well as any policy changes scheduled to be in effect in 2011 other than the 2011 update. The policies include:

- for fiscal year 2008, a market basket update of 3.3 percent;
- for fiscal year 2009, a market basket update of 3.6 percent;
- for fiscal year 2010, a 1.4 percent update composed of a market basket update of 2.1 percent and a projected 0.7 percent decrease in payments due to wage index changes and the first year of the phase-out of the hospice wage index budget-neutrality adjustment; and
- for fiscal year 2011, a projected 0.6 percent decrease in payments due to the second year of the phase-out of the wage index budget-neutrality adjustment.

Taking into account these policy changes and assuming that hospice costs grow at the same rate as the market basket over this period, we project an aggregate Medicare margin for hospices of 4.6 percent in fiscal year 2010. This margin projection excludes the cost of nonreimbursable bereavement services (about 1.5 percent of total costs). It also does not include any adjustment for the higher indirect costs observed among hospital-based and home-health-based hospices (which would add as much as 2 percentage points to the overall aggregate Medicare margin).

How should Medicare payments change in 2011?

The update in current law for fiscal year 2011 is the forecasted change in the hospital market basket. The market basket increase is currently projected to be 2.4 percent for 2011. However, CMS will update this forecast before using it to update payment rates for fiscal year 2011.

In considering an appropriate update for each sector, the Commission also takes into account improvements in productivity. Competitive markets demand continual improvements in productivity from workers and firms. These workers and firms pay the taxes used to finance Medicare. Medicare's payment systems should exert the same pressure on providers of health services. The Commission begins its deliberations with the expectation that Medicare should benefit from productivity gains in the economy at large (the 10-year average of productivity gains in the general economy is 1.3 percent). In some cases, if the Commission judges that payments are substantially above costs, it may decide not to apply a productivity adjustment because it instead applies a larger reduction to the payment rates (such as a zero update). In the case of hospice, based on our analyses of the various components of the update framework, the Commission believes hospice providers can operate within the current payment system with a moderate update in 2011. Therefore, the Commission recommends that a productivity adjustment be applied to the update for hospice services in 2011.

Update recommendation

We recommend that the Congress update payment rates for hospice services by the hospital market basket index, less the Commission's adjustment for productivity growth. Under the current forecast of the hospital market basket, the Commission's recommendation would update the hospice payment rates by 1.1 percent in 2011. (The market basket forecast will be updated by CMS before implementation, and therefore this number is subject to change.)

RECOMMENDATION 2E

The Congress should update the payment rates for hospice for fiscal year 2011 by the projected rate of increase in the hospital market basket index less the Commission's adjustment for productivity growth.

RATIONALE 2E

Our payment indicators for hospice are generally positive. The number of hospices has increased substantially in recent years, driven by the entry of for-profit providers. The number of beneficiaries enrolled in hospice, average length of stay, and total hospice payments have also increased. The projected 2010 aggregate Medicare margin is 4.6 percent.

Spending

- This recommendation would decrease federal program spending by between \$50 million and \$250 million over 1 year and between \$1 billion and \$5 billion over 5 years.

Beneficiary and provider

- We do not expect this recommendation to have adverse impacts on beneficiaries' access to care. The recommendation may increase financial pressure on some providers, but overall only a minimal effect on providers' willingness and ability to care for Medicare beneficiaries is expected. ■

Endnotes

- 1 When first established under TEFRA, the Medicare hospice benefit limited coverage to 210 days of hospice care. The Medicare Catastrophic Coverage Repeal Act of 1989 and the Balanced Budget Act of 1997 eased this limit.
- 2 The cap was legislatively set at \$6,500 in 1983 (Dole 1983). It is updated each year for inflation by the medical expenditure category of the consumer price index for urban consumers. The cap is not adjusted for geographic differences in wages. The average annual payment cap is calculated for the period November 1 through October 31 each year. For the year ending October 31, 2007, the cap was about \$21,410. Beneficiaries are counted in a given year if they have filed an election to receive care from the hospice during the period beginning on September 28 before the beginning of the cap period and ending on September 27 before the end of the cap period. If a beneficiary receives care from more than one hospice, each hospice counts the fraction that represents the portion of a patient's total hospice stay spent in that hospice.
- 3 In late 2007, CMS issued guidance to state survey and certification agencies indicating that surveys of new hospices applying to be Medicare providers (as well as other types of providers that have the option of obtaining Medicare status through accreditation rather than state surveys) should be in the lowest tier of their workload priorities.
- 4 This count of SNF-based hospices does not include freestanding hospices that are owned by a company that also owns nursing facilities. While we do not have an estimate of the number of freestanding hospices that are part of these types of joint ownership arrangements, joint ownership relationships exist among some hospice and nursing home chains.
- 5 The Agency for Healthcare Research and Quality analysis also identified patient satisfaction as an indicator of the effectiveness of provision of care at the end of life. As this measure is somewhat distinct from those listed here (it is a patient-centered measure rather than an assessment of the hospice's ability to provide a given intervention), patient satisfaction is discussed in more detail later in this chapter.
- 6 PEACE stands for prepare, embrace, attend, communicate, and empower.
- 7 Part of the reason the Florida report card does not distinguish well among hospice performance may be the broad definition it uses for favorable performance. For example, on questions that asked the family to rate the overall care provided by the hospice or the response by hospice staff on weekends and evenings, there were five possible responses: excellent, very good, good, fair, and poor. The report card assigned stars based on the percentage of favorable responses, with favorable defined as a rating of good, very good, or excellent.
- 8 In the cost-per-day calculation, costs reflect aggregate cost for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care). Days reflect the total number of days the hospice is responsible for care for Medicare patients, regardless of whether the patient received a visit on a particular day. The costs per day estimates are not adjusted for differences in case mix or wages across hospices.
- 9 The aggregate Medicare margin is calculated by the following formula: $((\text{sum of total payments to all providers}) - (\text{sum of total costs for all providers})) / (\text{sum of total payments to all providers})$. Data on total payments come from the Medicare claims data. Estimates of cap overpayments (which we exclude from the margin calculations unless otherwise noted) are also based on claims data. Data on total costs come from the Medicare cost reports.
- 10 The margin estimates for the period 2001–2005 in this report differ from the estimates for the same time period published in our June 2008 report. The margin estimates in this report exclude overpayments to above-cap providers and exclude Medicare nonreimbursable costs, whereas the prior margin estimates did not.
- 11 Fundraising costs are also considered nonreimbursable and are not included in our margin calculations. These costs amount to 1.5 percent of total costs.

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CHAPTER

3

**Post-acute care providers:
Common themes**

Post-acute care providers: Common themes

The recuperation and rehabilitation services that post-acute care (PAC) providers furnish are important to Medicare beneficiaries. Medicare beneficiaries can seek this care in four different PAC settings: skilled nursing facilities (SNFs), home health agencies (HHAs), long-term care hospitals (LTCHs), and inpatient rehabilitation facilities (IRFs). As with any service, Medicare's goal is to ensure that beneficiaries receive appropriate, high-quality care in the least costly setting appropriate for their clinical condition.

Common themes across post-acute care settings

Before discussing the Commission's assessment of the adequacy of Medicare's payments in each sector, we note four common themes across the sectors:

- Payments are not accurately calibrated to costs in each sector.
- Services overlap among settings.
- The PAC product is not well defined.
- Assessment instruments differ among settings.

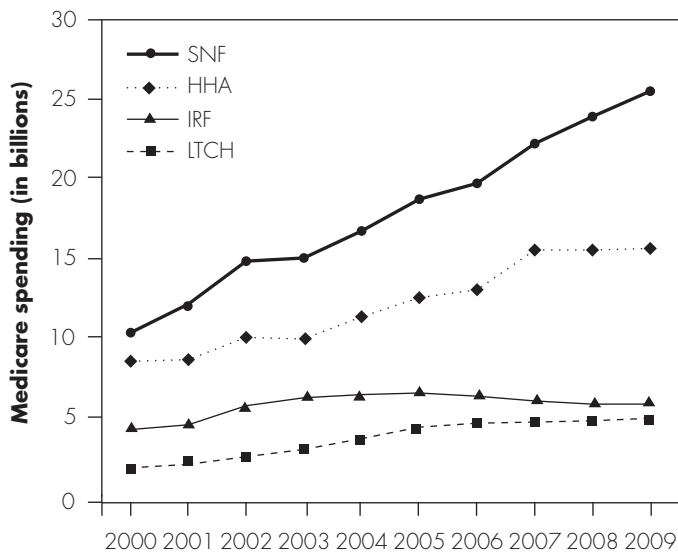
Refining the prospective payment systems (PPSs) and their case-mix systems will not fully resolve issues of whether

patients go to the lowest cost, appropriate post-acute setting or whether they need PAC at all. Some patients might recover and recuperate at home using outpatient services or they might do best by staying a few more days in the acute care hospital. Medicare would also want to make sure that beneficiaries receive the most clinically appropriate and effective care, regardless of the setting.

To this end, the Commission is looking beyond payment adequacy to think more broadly about how to match patients who use PAC with the set of services that can provide the best outcomes at the lowest cost. Building on past Commission work, we discuss two possible next steps. First, CMS could implement readmission policies for all PAC settings so that providers' incentives are aligned and they share the responsibility for avoiding unnecessary rehospitalizations. Second, CMS could establish a pilot to test the concept of bundling payments around a hospitalization for select conditions and include PAC in those bundles. By affecting all aspects of care (not just readmissions), bundling payments represents a bigger step toward aligning financial incentives and provider responsibility for patient outcomes across settings.

Payments are not accurately calibrated to costs

New PPSs for PAC providers have led to changes in the patterns of PAC use. CMS developed a PPS for each type of provider, following mandates in the Balanced Budget Act of 1997. Some providers have responded to

**FIGURE
3-1****Changes in spending since 2000
vary by PAC service**

Note: PAC (post-acute care), SNF (skilled nursing facility), HHA (home health agency), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital).

Source: CMS, Office of the Actuary.

the new incentives of the PPSs in ways that may not serve the program or beneficiaries well. The Commission has documented changes in the number of providers and the mix of services furnished and the patients served. For example, the explosive growth in the number of HHAs and the decline in the visits furnished per home health care episode raise questions about the level of payments and the difficulty in defining this product. The increasing intensity of rehabilitation services furnished by SNFs reflects financial incentives to provide this care and select patients who will be cared for most profitably. Utilization and spending in LTCHs and IRFs grew rapidly until other policies were put in place to begin to control the types of patients treated in these high-cost settings (Figure 3-1).

These provider responses have led us to call for refining the case-mix systems, measuring quality of care, and better defining the characteristics of the care that should be provided in each setting. The Commission has recommended that CMS refine the system for SNFs because of concerns that the payment system systematically pays too much for some types of patients and too little for others. Inaccurate case-mix systems in

general create incentives for providers to select patients for whom profits are highest and to avoid other patients. Preliminary work by the Commission suggests that this area is one for further inquiry for the HHA PPS.

Services overlap among settings

PAC settings lack clear boundaries around the services furnished and the types of patients treated. For example, patients with joint replacements might go home with home health care or outpatient therapy, to a SNF, or to an IRF upon leaving the hospital. Patients with complex medical conditions (e.g., patients who need respirator care) may go to an LTCH or a SNF, or they might stay longer in the acute care hospital. Yet, the setting where a patient is treated has very different cost implications for the program (and for the beneficiary, through the copayments). But all patients do not overlap; some patients clearly are best suited to particular settings.

Given the high cost of LTCHs and their overlap with other providers, criteria are needed to delineate patients appropriate for them. The Commission has recommended that patient and facility criteria be used to delineate patients who need the level of care provided by LTCHs.

The post-acute care product is not well defined

The product Medicare buys in each setting is not always clearly defined or measured, making it difficult to interpret changes in the use of PAC services. For example, the range of home health care services is fairly broad and the benefit is fairly open ended. This year, the Commission is recommending that the Secretary identify categories of patients who are likely to receive the greatest clinical benefit from home health care and develop outcome measures to gauge the quality of care furnished to patients in each category. This recommendation is intended in part to identify patients most appropriate for this service and to better define the benefit. SNFs vary considerably in the range of the medical complexity of patients they are willing and able to treat, with some being a ready substitute for an LTCH, while others are not. Because LTCHs are not located in many markets, some hospitals seem to be treating beneficiaries in parts of the country without these facilities.

The lack of clarity in the products of each sector makes it difficult to interpret changes in PAC service use. As patterns of care change in response to the incentives of a PPS, we do not know if the changes represent gains in

efficiency (in the case of lower costs or fewer services), better care (in the case of expanded services), or stinting (in the case of fewer services). Better measures of quality and outcomes are needed to address this issue. In the longer term, Medicare should identify the type of care that patients need, not the type of setting.

Assessment instruments differ among settings

The PAC settings do not use the same patient assessment instrument, which complicates cost and quality comparisons across settings. Medicare requires three of the PAC settings (HHA, SNF, and IRF) to use a setting-specific patient assessment tool but does not require LTCHs to use one. Ideally, a common assessment tool would gather uniform information to help providers make appropriate placement decisions and enable CMS to evaluate patient outcomes within and across settings.

CMS has a congressionally mandated demonstration under way testing the use of a uniform patient assessment tool in hospitals at discharge and throughout the patient's episode of care, assessing patients at admission and discharge from each PAC setting. The demonstration is in 10 markets, with CMS required to submit an evaluation report to the Congress in July 2011. Participating providers are also gathering data on staff time and ancillary service use that will be utilized to develop a common payment method across PAC settings. A common payment method could go far toward reaching the Commission's long-term goal: to pay for PAC based on the patient's care needs, not the setting where the service is provided.

Toward a more integrated approach to post-acute care

The goal of an integrated approach to PAC is for patients to go to the settings that can provide the best outcomes at the lowest cost to Medicare. Payments should reflect the characteristics of the patients' care needs, not the setting. The themes just outlined lead us to consider two previous sets of recommendations the Commission has made that could improve care while more integrated solutions are designed: aligning readmission policies for hospitals and PAC providers and bundling payments for acute and post-acute care for select conditions. Both represent building blocks for broader, more integrated care.

Aligning readmission policies for hospitals and post-acute care providers

One interim step toward more integrated PAC is to align payment incentives to prevent potentially avoidable rehospitalizations. Spending on readmissions is considerable. In 2005, potentially avoidable readmissions cost the program more than \$12 billion, though even with the best standards of care being practiced not all of them can be avoided (Medicare Payment Advisory Commission 2008). In 2007, more than 18 percent of SNF stays resulted in a potentially avoidable readmission to a hospital (see Chapter 3A on SNFs).

Aligning the payment incentives across acute and post-acute care providers would hold providers jointly responsible for the care furnished to beneficiaries. It would discourage hospitals from discharging patients prematurely or without adequate patient and family education and would encourage PAC providers to furnish adequate care to avoid unnecessary hospitalizations (for conditions such as urinary tract infections and congestive heart failure). Aligned incentives would also emphasize the need for providers to manage the care during beneficiary transitions between settings and to coordinate all care so that total episode spending does not exceed the episode payment.

The Commission previously recommended that hospitals be penalized for high readmission rates and that SNFs have their payments tied to quality metrics such as their rate of potentially avoidable rehospitalizations. Readmission policies could be expanded to include all post-acute settings.

Bundling services across an episode of care

Under any PPS, providers have an incentive to limit their financial liability by discharging patients to other providers or settings. Yet, such fragmentation of care runs counter to the broad long-term goal of the Commission to have providers assume more responsibility for the services a beneficiary receives over the entire episode of care. Bundling payments for services centered around a hospital stay would create incentives for providers to place patients in the appropriate PAC setting so that care is coordinated and efficient over the entire episode of care. Given the wide variation in and magnitude of PAC spending in the post-discharge period, expanding the window of care to include PAC services could yield considerable efficiencies.

The Commission previously recommended that the Congress require CMS to create a pilot program to test

the feasibility of bundled payments for services around a hospitalization for select conditions. Bundles that include post-acute services would have the added benefit of reducing variation in health care spending across geographic areas and providers. Under models that the Commission has explored, Medicare would pay a single provider (a hospital and its affiliated physicians) an amount intended to cover a patient's inpatient, outpatient, and PAC needs centered on an initial hospitalization. Providers would have incentives to furnish the right mix of services because their financial performance would be tied to their combined efficiencies and appropriate use of services. Providers would have an incentive to control their own costs, to partner with other efficient providers, to be mindful of their combined service use, and to coordinate care and manage beneficiary transitions between settings. Coupled with pay-for-performance and readmission policies, providers would also have joint responsibility for patient outcomes.

The Commission acknowledges that bundling acute and post-acute services will be challenging. Most obviously, not all PAC is preceded by a hospital stay. For example, about half of home health care patients are referred from the community. For patients without hospital stays, bundled payments are not a solution for improving their care. In addition, certain conditions (in which clinicians agree on best practices) lend themselves

more readily to bundled payments. In clinical areas with disagreement about the best way to treat a certain type of case, establishing a bundled payment would be controversial. Furthermore, bundling will require a level of integration between hospitals, physicians, and PAC providers that does not exist in most markets. Establishing arrangements between providers to accept and distribute bundled payments will be difficult even for providers that are well integrated, let alone for the majority of providers that are not. For example, post-acute providers may resist an arrangement that has them being paid by a hospital. Another obstacle will be the provider and program resources needed to develop the tools necessary to track service use, costs, and payments over time and across settings.

Concluding remarks

As beneficiaries live longer with multiple chronic conditions, the use of PAC will continue to increase. It is imperative therefore that Medicare better define post-acute services and their use to ensure beneficiaries have access to high-quality, high-value care most appropriate to their care needs. Bundling and readmission policies are ways to force some of this decision making onto providers so that they consider beneficiaries' care over longer episodes of care and begin to assume responsibility for managing beneficiary care during the transitions between settings. ■

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3A

SECTION

Skilled nursing facility services

R E C O M M E N D A T I O N S

- 3A** The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2011.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

.....

(For additional recommendations on improving the skilled nursing facility payment system, see text box on p. 191.)

3 A

SECTION

Skilled nursing facility services

Section summary

Skilled nursing facilities (SNFs) furnish short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. Most SNFs are part of nursing homes that furnish long-term care, which Medicare does not cover. In 2008, 15,053 SNFs furnished covered care to 1.6 million beneficiaries. In fiscal year 2009, Medicare spent \$25.5 billion on SNF care.

Assessment of payment adequacy

Most indicators of payment adequacy for SNFs are positive.

Beneficiaries' access to care—Access to SNF services remains good for most beneficiaries, but certain subgroups of beneficiaries—those with medically complex care needs and members of racial minorities—warrant further analysis.

- **Capacity and supply of providers**—The number of SNFs has increased slowly since 2001. SNF bed days available have steadily risen at an average annual increase of 7 percent since 2001. SNF occupancy (84 percent) has been stable for several years. Since 2003, the share of SNFs admitting medically complex patients decreased, indicating that access for these beneficiaries may be delayed.
- **Volume of services**—Days and admissions on a per fee-for-service beneficiary basis increased slightly between 2007 and 2008, suggesting

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- Are Medicare payments adequate in 2010?
.....
- How should Medicare payments change in 2011?
.....

that access was maintained. However, admission rates for African American beneficiaries were lower than for white beneficiaries, and the differences have grown over time. SNF days were increasingly concentrated in the rehabilitation case-mix groups and, within those, in the highest intensity categories.

Quality of care—SNF quality of care continues to be mixed. Two indicators of quality in SNFs are the rates at which patients are discharged to the community within 100 days of admission and rates at which patients are rehospitalized for conditions that potentially could have been avoided. Between 2006 and 2007, the risk-adjusted rates of community discharge increased to reach the highest level since 2000 (indicating higher quality), while potentially avoidable rehospitalizations steadily increased (indicating poorer quality), though the 2007 rate was almost the same as that for the prior year. Risk-adjusted quality outcomes did not vary by race.

Providers' access to capital—Because most SNFs are part of a larger nursing home, we examine nursing homes' access to capital. Access to capital improved over the last year but the lending terms are stricter and owners and operators are more carefully screened than in the past. Uncertainties in lending do not center on the adequacy of Medicare payments; from all accounts, Medicare remains a sought-after payer.

Medicare payments and providers' costs—Increases in payments between 2007 and 2008 outpaced increases in provider costs, reflecting the continued concentration of days in the highest payment case-mix groups. In 2008, the average Medicare margin for freestanding SNFs was 16.5 percent. Financial performance continued to differ substantially across the industry—a function of distortions in the prospective payment system (PPS) and cost differences among providers. SNFs with the highest margins had higher shares of days in intensive rehabilitation case-mix groups and lower shares of days in the medically complex groups than SNFs with relatively low margins. We found that freestanding SNFs with low Medicare margins had standardized costs per day (adjusted for differences in wages and case mix) 42 percent higher than SNFs with high Medicare margins. Our previously recommended changes to the PPS design—adding a new component to pay separately for nontherapy ancillary services and basing therapy payments on patient care needs—would, if implemented, result in narrowing the differences in financial performance across the industry. The projected Medicare margin for 2010 is 10.3 percent. We believe this margin is sufficient to accommodate cost increases in 2011.

On the basis of these analyses, the Commission recommends eliminating the update for fiscal year 2011. ■

**TABLE
3A-1****A growing share of Medicare stays and payments
go to freestanding SNFs and for-profit SNFs**

Type of SNF	Facilities		Medicare-covered stays		Medicare payments	
	2005	2008	2005	2008	2005	2008
Total number	14,955	14,819	2,444,796	2,411,296	\$18.2 billion	\$22.9 billion
Freestanding	92%	93%	87%	91%	93%	95%
Hospital based	8	7	13	9	7	5
Urban	67	70	79	81	81	83
Rural	33	30	21	19	19	17
For profit	68	68	66	69	72	74
Nonprofit	28	26	30	27	25	22
Government	5	5	4	3	3	3

Note: SNF (skilled nursing facility). Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Provider of Services and Medicare Provider Analysis and Review files.

Background

Skilled nursing facilities (SNFs) provide short-term skilled nursing care and rehabilitation services, such as physical and occupational therapy and speech–language pathology services. Examples of SNF patients include those recovering from surgical procedures such as hip and knee replacements or from medical conditions such as stroke and pneumonia (see the online appendix to this chapter, available at <http://www.medpac.gov>). About 5 percent of fee-for-service (FFS) beneficiaries used SNF services at least once in 2008 and program spending totaled \$25.5 billion in fiscal year 2009.

Medicare covers up to 100 days of SNF care after a medically necessary hospital stay of at least 3 days. For beneficiaries who qualify for a covered stay, Medicare pays 100 percent of the payment rate for the first 20 days of care. Beginning with day 21, beneficiaries are responsible for copayments. In 2010, the copayment is \$137.50 per day.

The term “skilled nursing facility” refers to a provider that meets Medicare requirements for Part A coverage.¹ The vast majority (more than 90 percent) of SNFs are dually certified as a SNF and as a nursing home. Thus, a facility that provides skilled care often also furnishes long-term care services that Medicare does not cover. SNFs are

either hospital based or freestanding. In 2008, 93 percent of SNFs were freestanding and accounted for a growing share of Medicare stays and spending (Table 3A-1). In 2008, about two-thirds of SNFs were for profit and treated about the same share of stays but accounted for almost three-quarters of Medicare payments to SNFs.

Within SNFs, Medicare-covered SNF patients are typically a small share of the SNF’s total patient population. At the median, Medicare-covered SNF days in 2008 made up just over 12 percent of total patient days in freestanding facilities; only 1 in 10 freestanding SNFs had 29 percent or more total patient days that were covered by Medicare.

Medicare uses a prospective payment system (PPS) to pay for each day of service.² Information gathered from a standardized patient assessment instrument—the Minimum Data Set (MDS)—is used to classify patients into 53 case-mix categories, called resource utilization groups (RUGs). RUGs differ by the services furnished to a patient (such as the amount and type of therapy furnished and the use of respiratory therapy and specialized feeding), the patient’s clinical condition (such as whether the patient has pneumonia), and the patient’s need for assistance to perform activities of daily living (such as eating and toileting). In 2011, CMS plans to revise the case-mix groups to more accurately reflect relative differences in resource use, as measured by staff times associated with caring for different types of patients (see discussion on p. 176).

**TABLE
3A-2****Broad case-mix groups in the skilled nursing facility prospective payment system**

Patient group	Types of patients included in group
Broad resource utilization groups	
Clinically complex	Patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy.
Special care	Patients with multiple sclerosis, surgical wounds, skin ulcers, or cerebral palsy; those who receive respiratory services seven days per week; or those who are aphasic or tube fed.
Extensive services	Patients who have received intravenous medications or suctioning in the past 14 days, required a ventilator/respirator or tracheostomy care, or received intravenous feeding within the past 7 days.
Rehabilitation	Groups based on minutes of therapy per week: Ultra high: patients received over 720 minutes Very high: patients received 500–719 minutes High: patients received 325–499 minutes Medium: patients received 150–324 minutes Low: patients received 45–149 minutes
Rehabilitation plus extensive services	Patients received enough to qualify them for a rehabilitation case-mix group and they received one or more extensive services
Subgroups used in MedPAC analyses	
Medically complex	Clinically complex and special care cases. Extensive service groups are excluded from this definition because days can be assigned to them based on services furnished before admission to the skilled nursing facility. CMS found that services provided during the prior hospital stay were not an accurate proxy for medical complexity (Centers for Medicare & Medicaid Services 2009).
Intensive rehabilitation	Ultra high rehabilitation, ultra high rehabilitation plus extensive services, very high rehabilitation, and very high rehabilitation plus extensive services cases

The Commission previously described and made recommendations related to two key shortcomings of the SNF PPS (Medicare Payment Advisory Commission 2008a, Medicare Payment Advisory Commission 2008b). First, the PPS does not adequately adjust payments to reflect the variation in providers' costs for nontherapy ancillary (NTA) services (for most patients, these services are predominantly drugs). Payments for NTA services are tied to the nursing component, even though NTA costs do not necessarily vary with, and are much more variable than, staff time. The Commission recommended that a separate payment component be established to pay for NTA services so that payments are targeted to patients with high NTA care needs.

Second, payments increase with the provision of therapy, creating a financial incentive to furnish these services. Moreover, therapy payments are not well calibrated to therapy costs so that, as the cost of these services increases, payments to cover them rise even faster. The Commission recommended replacing the existing therapy component with one that bases payments on patient characteristics so that payments vary with care needs.

CMS has acknowledged and taken several steps to enhance payments for medically complex care and to control therapy provision. CMS plans to implement a new case-mix system in 2011 that expands the number of case-mix groups for special care and clinically complex

case-mix groups and more narrowly tailors the extensive services groups (eliminating the provision of intravenous (IV) medications from the definition; see Table 3A-2 for definitions). CMS also directed program dollars away from therapy care and toward medically complex care by raising nursing component payments by an estimated 21 percent and lowering therapy component payments by 41 percent (Centers for Medicare & Medicaid Services 2009).³ As payments for the nursing component increase, payments for NTA services also rise. However, because payments for NTA services will continue to be tied to the nursing component, they may not match individual patients' care needs. As a result, the PPS may continue to encourage SNFs to avoid patients with above-average NTA care needs. To that end, CMS intends to implement a payment adjustment for NTA services but has not yet proposed a design.

In 2011, CMS plans two other changes that will affect the assignment of patient days into case-mix groups. The patient assessment tool used to classify patients into the groupings will no longer consider services (such as IV medications) furnished before admission to the SNF. This change will lower the number of patients who qualify for the rehabilitation-plus-extensive-services case-mix groups. In addition, CMS will modify the way it counts therapy services furnished concurrently (when a therapist supervises multiple patients at the same time, and patients are engaged in different therapy activities). Patients who receive therapy services concurrently will be more likely to qualify for less intensive rehabilitation case-mix groups than under current rules.

The planned changes to the therapy component—the shifting of program dollars away from the therapy component and the counting of concurrent therapy minutes—will make rehabilitation care less financially attractive for providers. They may not, however, remove the basic incentive to furnish more therapy in order to be paid more. The Commission supports basing payments on care needs and not on service provision.

Are Medicare payments adequate in 2010?

Indicators of payment adequacy are positive for SNFs. To make this assessment, we analyzed access to care (including the supply of providers and volume of services), quality of care, provider access to capital,

Medicare payments in relation to costs to treat Medicare beneficiaries, and changes in payments and costs. We also compared the performance of SNFs with relatively high and low Medicare margins.

Beneficiaries' access to care: Access is good for most beneficiaries but certain subgroups warrant closer examination

In 2009, most beneficiaries had good access to services, but the Commission is concerned about two subgroups of beneficiaries—those with medically complex care needs and minorities. The number of SNFs has remained about the same for several years and volume—as measured by SNF days and covered admissions per 1,000 FFS enrollees—increased between 2007 and 2008. The share of days assigned to rehabilitation case-mix groups and, within those, to high-intensity case-mix groups, continued to increase.

Capacity and supply of providers: Supply remains stable

The number of SNFs participating in the Medicare program slowly increased from 14,778 in 2001 to 15,053 in 2009 (Figure 3A-1, p. 178). Between 2008 and 2009, there were 108 new facilities but during the same period 83 facilities closed.⁴ Although 6 hospital-based units began participating in the Medicare program during 2008, many more hospital-based units stopped, so there were 41 fewer hospital-based facilities by the end of 2009. Fewer than 1 percent of SNFs stopped participating in the Medicare program last year and most of them did so voluntarily.

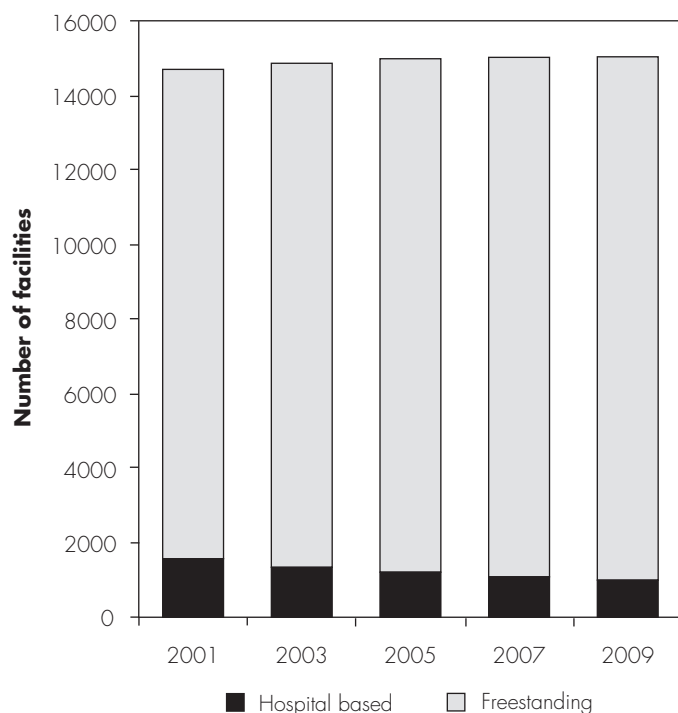
The mix of ownership and facility type remained constant between 2007 and 2009. After a steady decline since 2000, the share of hospital-based facilities remained at 7 percent for the third year in a row. The share of for-profit SNFs remained at 69 percent, having increased slightly from 67 percent in 2000.

Other measures of capacity include the number of SNF beds available during the year and occupancy rates. SNF bed days available (the days available for occupancy after adjusting for beds temporarily out of service due to, for example, renovation or patient isolation) increased 7 percent between 2007 and 2008, consistent with the average annual increase since 2001. The average occupancy rate was 84 percent, consistent with occupancy rates since 2002.

State policies play a large role in the ability of this sector to expand. Certificate-of-need programs regulate the

**FIGURE
3A-1**

The number of SNFs grew slightly since 2001 but the mix has shifted to freestanding facilities



Note: SNF (skilled nursing facility). Counts do not include swing beds.

Source: MedPAC analysis of data from the Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system for 2000–2009.

expansion of long-term care facilities in more than half the states. Yet, more than half of the new SNFs in 2009 (those that began participating in the Medicare program) were located in states with certificate-of-need programs for these services. The perceived adequacy of a state's Medicaid payment rates, the dominant payer in most facilities, is also a key factor in a facility's decision to enter the market or to expand.

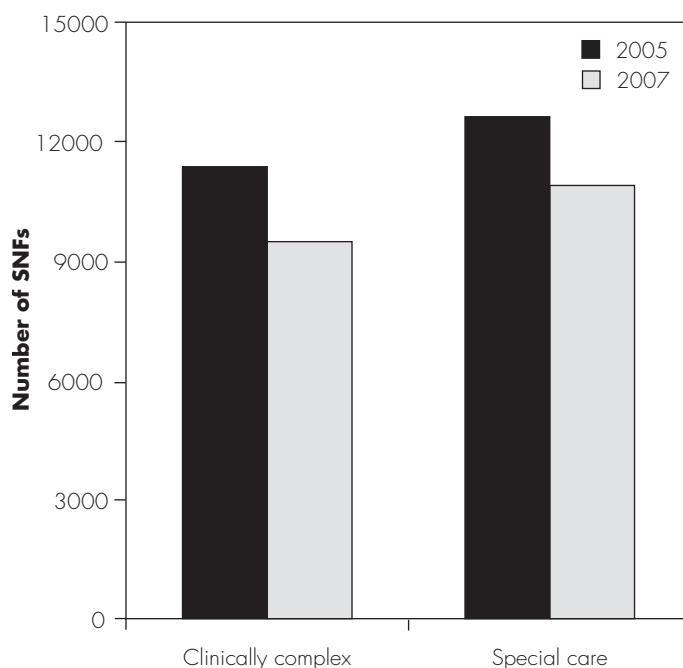
While supply remains stable, the number of SNFs that treat medically complex patients continues to decline. Patients grouped into the clinically complex and special care case-mix groups account for about 6 percent of Medicare days (see Table 3A-2, p. 176, for definitions). Between 2005 and 2007, the number of facilities admitting clinically complex and special care patients decreased (almost 9 percent and 7 percent, respectively), even though the number of SNFs remained about the same (Figure

3A-2). As a result, the distributions of medically complex admissions were more concentrated in fewer SNFs than rehabilitation admissions.⁵ Because minorities make up a larger share of medically complex admissions than rehabilitation admissions, some minority beneficiaries may experience delays in being transferred to a SNF or may be placed in SNFs further from their homes.⁶ The decline in the number of SNFs willing or able to treat special care and clinically complex patients reflects, in part, the relative attractiveness of the payments for rehabilitation case-mix groups. Some SNFs may furnish enough therapy services to medically complex patients to qualify them for higher payment rehabilitation case-mix groups.

The changes to the PPS that CMS plans to implement in 2011 are likely to increase access for medically complex patients because they raise payments for medically

**FIGURE
3A-2**

The number of SNFs that admitted clinically complex and special care cases decreased between 2005 and 2007



Note: SNF (skilled nursing facility). Category based on admitting case-mix group assignment. The clinically complex category includes patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy. The special care category includes patients with multiple sclerosis or cerebral palsy, those who receive respiratory services seven days per week, or those who are aphasic or tube fed.

Source: MedPAC analysis of 2006 DataPro data from CMS.

**TABLE
3A-3****SNF volume increased in 2008**

	2005	2006	2007	2008	Percent change 2007-2008
Volume per 1,000 fee-for-service enrollees					
Covered admissions	70	71	72	74	2.3%
Covered days (in thousands)	1,811	1,874	1,925	1,991	3.4
Covered days per admission	25.9	26.4	26.7	27.0	1.1
Total SNF volume					
Covered admissions	2,546,408	2,543,133	2,533,016	2,561,073	1.1
Covered days (in thousands)	66,002	67,143	67,663	69,157	2.2
Covered days per admission	25.9	26.4	26.7	27.0	1.1

Note: SNF (skilled nursing facility). Data include 50 states and the District of Columbia.

Source: Calendar year data from CMS, Office of Research, Development, and Information.

complex patients. The Commission will continue to monitor the distribution of where medically complex patients are treated to assess whether the new classification system has improved access for them. However, patients who require high-cost NTA services may still experience delays in SNF placement because the changes do not specifically target payments to patients with high NTA care needs. The Commission's recommended changes to the PPS—adding a separate NTA component and revising the existing therapy component—would redistribute payments across different types of cases and the SNFs that treat them. We estimated that aggregate payments to SNFs with the highest NTA costs would increase 23 percent (Medicare Payment Advisory Commission 2008b).

Volume of services: Increased volume suggests access is adequate

Between 2007 and 2008, the share of FFS beneficiaries who used SNF services remained at just under 5 percent. We examine utilization on a FFS enrollee basis because the counts of users, days, and admissions do not include service use by beneficiaries enrolled in Medicare Advantage (MA) plans. Because MA enrollment continues to increase, changes in reported utilization could reflect a declining number of FFS beneficiaries rather than reductions in service use.

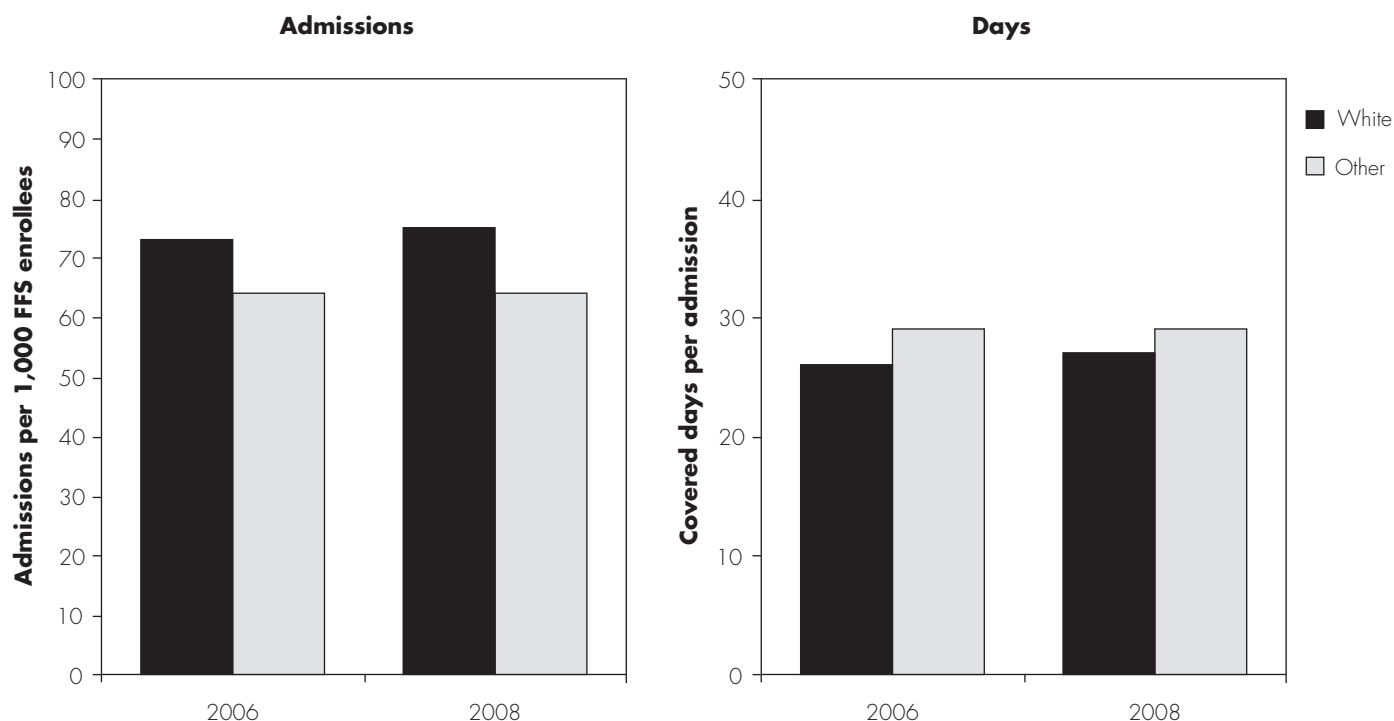
On a per FFS enrollee basis, SNF volume grew between 2007 and 2008. Admissions rose 2.3 percent, while covered days increased 3.4 percent, translating into longer covered stays (Table 3A-3). Despite increased enrollment

in MA, for which volume is not included in the data, unadjusted volume measures also grew during this period. Between 2007 and 2008, admissions increased by more than 1 percent and days increased by more than 2 percent.

SNF use is uneven among beneficiaries of different races, raising concerns about minorities' access to care (Figure 3A-3, p. 180). In 2008, admissions per 1,000 FFS enrollees were 17 percent higher for whites than for beneficiaries of other races and these differences have grown over time. Although admission rates were lower, lengths of stay for beneficiaries of other races were longer than those for white beneficiaries, perhaps reflecting differences in case mix. As lengths of stay for whites have increased, differences among the races have gotten smaller. We have not examined these racial differences to know, for example, if minority beneficiaries use other post-acute services instead of SNF care or whether minority beneficiaries are less likely to be hospitalized for conditions that typically are followed by SNF care.

Growth in the number and intensity of rehabilitation days

Rehabilitation days continued to grow as a share of all Medicare SNF days. In 2008, rehabilitation days accounted for 90 percent of Medicare SNF days, up from 82 percent in 2004 (Figure 3A-4, p. 181). In January 2006, CMS implemented nine new rehabilitation case-mix groups for patients who qualify for both rehabilitation and extensive services (see Table 3A-2, p. 176, for definitions). The new case-mix groups were added to the top of the

**FIGURE
3A-3****Admission rates and covered days per admission vary by race**

Note: FFS (fee-for-service). Data include 50 states and the District of Columbia.

Source: Calendar year data from CMS, Office of Research, Development, and Information.

classification hierarchy and assigned the highest payments. In 2008, these new RUG categories accounted for 37 percent of days, while days classified in the rehabilitation-only RUGs continued to decline. The large number of rehabilitation plus extensive services days may reflect providers' coding improvements to record extensive services provided by the SNF or during the previous hospital stay to obtain higher payments associated with these case-mix groups.⁷ In 2011, CMS plans to change the extensive services that qualify for the extensive services' case-mix groups, which is likely to reduce the days that are assigned to them.

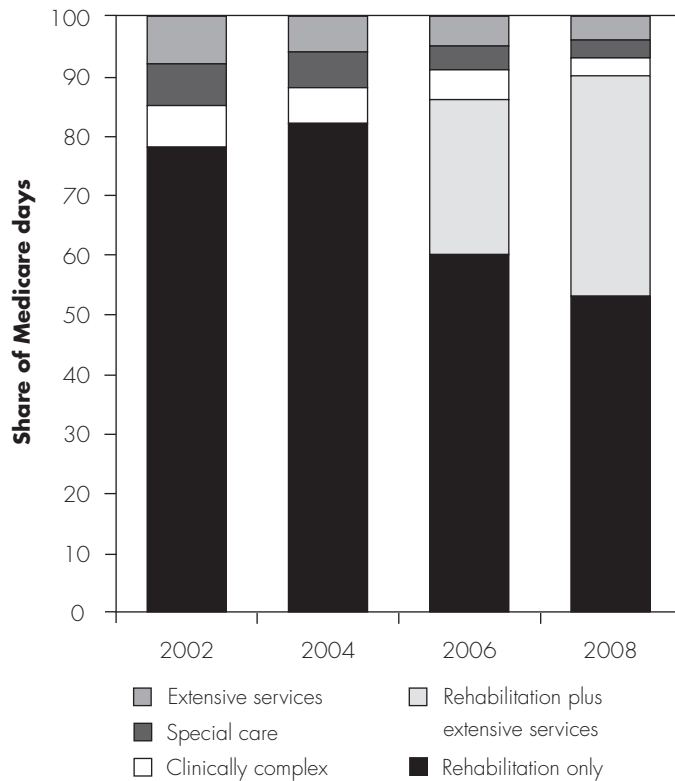
Within the rehabilitation case-mix groups, the distribution of days continued to shift toward the highest intensity (and payment) therapy groups (Figure 3A-5). Between 2006 and 2008, the share of ultra-high and very high rehabilitation days increased 35 percent, making up almost two-thirds of all rehabilitation days in 2008. During this period, the share of rehabilitation days in the high, medium, and low rehabilitation groups declined 10 percent.

In addition to the payment incentives, some of the growth in rehabilitation days may also be explained by a shift in the site of care from inpatient rehabilitation facilities (IRFs) to SNFs, as IRFs comply with the 60 percent rule, stipulating that at least 60 percent of patients treated by IRFs have 1 of 13 specified conditions.⁸ Between 2004 and 2008, the share of beneficiaries who had a major joint replacement or revision (not among the IRF-specified conditions) and were discharged from a hospital to a SNF increased 3 percentage points (from 33 percent to 36 percent), while the share discharged to an IRF declined 14 percentage points (from 28 percent to 14 percent).

It is unlikely that changes in the care needs of the patients admitted between 2005 and 2007 fully account for the growth in rehabilitation days. Assessments conducted at or near admission (on or about day five of the stay) indicate that reductions between 2005 and 2007 were small in the patients' ability to conduct activities of daily living at admission (as measured by the Barthel score) and in their cognitive function.⁹ During the same period, the average

**FIGURE
3A-4**

Case mix in freestanding SNFs continued to shift toward rehabilitation plus extensive services RUGs and away from other broad RUG categories



Note: SNF (skilled nursing facility), RUG (resource utilization group). The clinically complex category includes patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy. The special care category includes patients with multiple sclerosis or cerebral palsy, those who receive respiratory services seven days per week, or are aphasic or tube fed. The extensive services category includes patients who have received intravenous medications or suctioning in the past 14 days, have required a ventilator/respirator or tracheostomy care, or have received intravenous feeding within the past 7 days. Days are for freestanding SNFs with valid cost report data.

Source: MedPAC analysis of freestanding SNF cost reports.

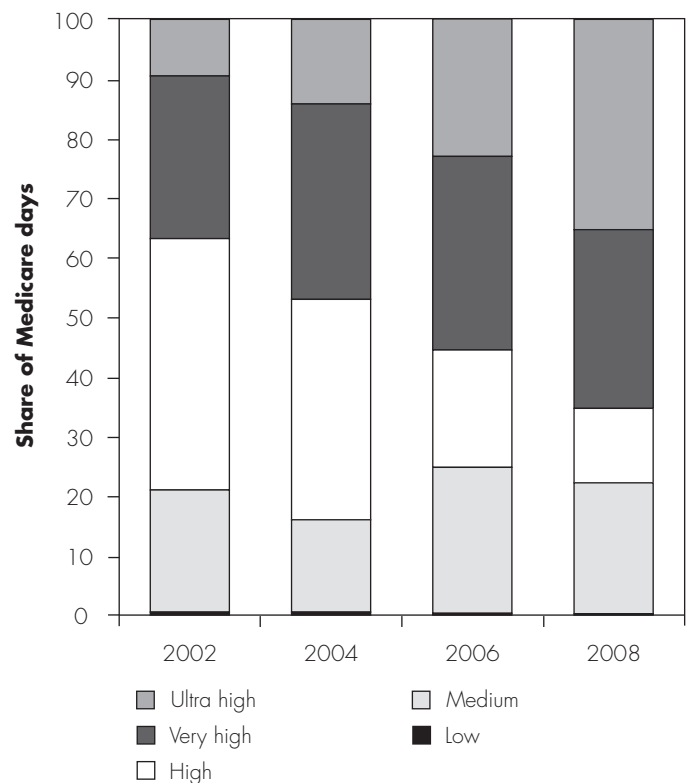
MA risk score for Medicare beneficiaries who used SNF services decreased slightly (–1.6 percent), indicating that Medicare beneficiaries would be less, rather than more, costly to treat.¹⁰

SNFs vary considerably in their provision of intensive rehabilitation services (see Table 3A-2, p. 176, for definition). Annual reports filed by publicly traded companies state that attracting Medicare patients and furnishing intensive therapy are business strategies

they pursue (Extendicare 2008, Extendicare 2009, Sun Healthcare Group 2009). Our analysis of the providers of intensive therapy found that hospital-based facilities were overrepresented in the group of SNFs with the lowest shares (the bottom 10th percentile) of the intensive rehabilitation days. They made up 19 percent of this group, even though hospital-based facilities make up only 7 percent of SNFs. For-profit facilities were underrepresented, making up 55 percent of this lowest percentile group compared with their two-thirds share of facilities. One industry analysis reported that some freestanding SNFs specializing in short-term rehabilitation use narrow patient selection criteria to admit the highest payment patients, leaving lower payment, harder-to-place patients to be treated in hospital-based facilities (Cain Brothers 2009).

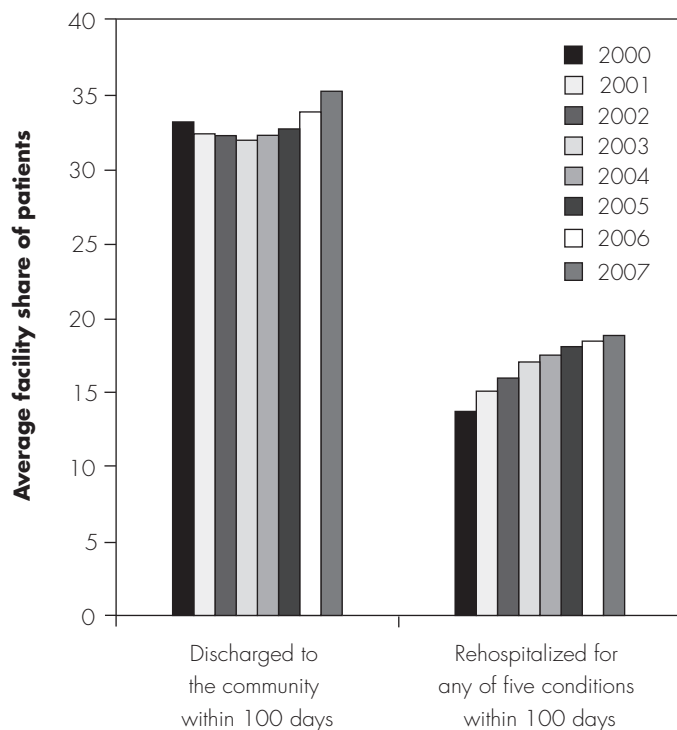
**FIGURE
3A-5**

Rehabilitation days in freestanding SNFs continue to shift toward higher intensity case-mix groups



Note: SNF (skilled nursing facility). Days are for freestanding SNFs with valid cost report data. Rehabilitation days include days in the rehabilitation case-mix groups and the rehabilitation plus extensive services case-mix groups.

Source: MedPAC analysis of freestanding SNF cost reports.

**FIGURE
3A-6****Quality results for SNFs
between 2000 and 2007**

Note: SNF (skilled nursing facility). The five conditions include congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance. Increases in rates of discharge to community indicate improved quality; increases in rehospitalization rates for the five conditions indicate worsening quality. Rates are risk adjusted and calculated for all facilities with more than 25 stays.

Source: Rates calculated for MedPAC by A. Kramer et al. 2009.

Service use trends highlight need to make changes to PPS

The concentration of special care and clinically complex admissions in fewer SNFs and the growing share and intensity of rehabilitation days underscore the need to change the PPS. The changes recommended by the Commission would raise payments for medically complex patients and lower them for rehabilitation case-mix groups. Payments would be redirected across facilities, depending on their mix of patients—for example, payments to hospital-based facilities and nonprofit facilities would increase 20 percent and 7 percent, respectively (Medicare Payment Advisory Commission 2008b). These distributional impacts are important in considering the package of SNF recommendations (see p. 191).

The revisions planned by CMS—the restructuring of the case-mix system and the shifting of program spending away from the therapy component and toward the nursing component—also redistribute payments, though their impacts on various groups of SNFs are smaller.¹¹ While the changes represent important building blocks to shift payments, the Commission believes that additional reforms for NTA and therapy services are still needed. Payments need to target NTA services so that patients with these high care needs do not face delays in placement. CMS intends to establish a payment adjustment for NTA services but has not yet proposed a design. Therapy payments need to be based on patients' care needs and not on the services furnished. Otherwise, providers may still have an incentive to furnish therapy for financial rather than for clinical reasons.

Quality of care: SNF quality mixed

The quality of rehabilitation care furnished to patients during a Medicare-covered SNF stay continued to show mixed results over time—with one indicator showing improved quality and the other showing poorer quality, though the rate of deterioration has slowed. In 2007, the most recent data available, the risk-adjusted rate at which SNFs discharged patients to the community within 100 days was the highest it had been since 2000, indicating improved rehabilitation quality (Figure 3A-6).¹² The mean risk-adjusted rate of community discharge declined between 2000 and 2003 and since then has slowly increased, with the most recent data indicating the largest improvement. In 2007, the rate was 35.2 percent compared with 33.1 percent in 2000.

The rate at which Medicare-covered SNF patients were returned to the hospital for potentially avoidable causes remained essentially the same between 2006 and 2007. The risk-adjusted rates of potentially avoidable rehospitalization within 100 days for 5 conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) have been increasing since 2000, indicating declining quality. The increases have been less each year (i.e., the upward trend has leveled off) with the rates in 2006 and 2007 being comparable. In 2007, the mean risk-adjusted facility rate for the five potentially avoidable rehospitalization conditions was 18.5 percent, compared with 13.7 percent in 2000.

Risk-adjusted results for the two quality measures continue to differ by facility type and ownership. Compared

with freestanding facilities, hospital-based facilities had community discharge rates that were 7.4 percentage points higher and potentially avoidable rehospitalization rates 3.1 percentage points lower, after controlling for differences in case mix, ownership, and location. Hospital-based SNFs may have lower rehospitalization rates in part because they have higher staffing levels and skill mix. In addition, patients in hospital-based facilities have relatively easy access to physician and ancillary services that could otherwise require a hospital readmission for patients in freestanding SNFs. Previous Commission analysis found that about half of hospital-based facilities operate rehabilitation models of SNF care and are selective in the patients they admit (Medicare Payment Advisory Commission 2007). The performance of for-profit facilities differed from nonprofits, with higher community discharge rates (by 0.5 percentage point) but also higher potentially avoidable rehospitalization rates (by 1.3 percentage points) compared with nonprofit SNFs. Additional unmeasured differences in case mix and other factors that were not accounted for (such as staffing turnover and level of experience) could also explain some of the differences in quality measures by facility type and ownership.

We also examined outcome measures by race and found differences by racial group that were not significant when other factors, such as patient condition, were considered. In 2007, whites had community discharge rates that were 1.4 times those of African Americans, who had the lowest rates of all racial groups examined. This difference was consistent over time (since 2000). African Americans had potentially avoidable rehospitalization rates that were 1.4 times higher than those for whites (and the highest of all racial groups), though the differences have declined since 2000. However, once beneficiaries' characteristics—such as their ability to perform activities of daily living, their cognitive function, and their comorbidities—were accounted for, the outcome differences by racial group were not statistically significant.

With an increasing share of beneficiaries classified into rehabilitation case-mix groups, changes in a beneficiary's functional status between admission and discharge could help assess whether these services were beneficial. Unfortunately, providers are not required to conduct patient assessments at discharge, so we do not have this information. However, beginning in 2011, providers will be required to conduct assessments at discharge, and we will be able to assess whether service provision is related to improvement (or no deterioration) in functional status.

Providers' access to capital: Available but uncertainties persist

Because the vast majority of SNFs operate within nursing homes, we assess the access to capital for nursing homes. Capital is more available than last year, but lending is constrained by uncertainties in this sector. The restrained lending is not a reflection of the adequacy of Medicare payments—the program continues to be a highly valued payer. Market analysts we spoke with indicated that, because most operators make their bottom line by using Medicare profits, lenders use Medicare payer mix as one metric of a facility's financial health (see text box, p. 184, on Medicaid payment effects on nursing facility margins).

Some market analysts noted that, while capital is available, at least two uncertainties have slowed lending and raised its price. First is the downturn in many states' economies that analysts report could threaten the level of Medicaid payments, the dominant payer for most facilities. Delays in states' payments have also increased facilities' need for working capital. Second, with so few projects being financed, lenders face uncertainty in establishing the conditions for borrowers because they lack comparables. Analysts did not think lending would ease considerably during 2010.

The number and scale of the projects continue to be small. Between 2006 and 2008, the number and value of publicly announced mergers and acquisitions of long-term care providers (nursing homes and assisted living facilities) declined considerably (Irvin Levin Associates 2009). For nursing homes that sold, the average price paid per nursing home bed declined 18 percent between 2007 and 2008 (Irvin Levin Associates 2009). This year, a survey of lenders to long-term care operators found that the number of lenders had declined considerably from two years ago (Andrews 2009). For the first six months of 2009, the volume of lending transactions was down 77 percent from 2007 (Ambrose 2009).

Market analysts indicate that nursing homes can get loans for the right project, but the loan process can be more demanding than before the credit crisis. Borrowers may need to canvass 15 to 30 lenders before getting a loan. Lending criteria have become stricter, with more information required about the owner and operator. Facilities are examined for their cash flow, their accounts receivable, and financial operating history. In addition, more attention is being paid to the quality of care and operations; both will help ensure a facility's financial viability. Local and regional banks continue to do smaller

Medicaid payment effects on nursing facility margins

The Commission considers the Medicare margin as one factor to guide its update recommendation for skilled nursing facilities (SNFs), as our primary responsibility is to advise the Congress on Medicare payment policy. The Medicare margin is an appropriate measure of the adequacy of the program's payments because it compares Medicare's payments with the costs to treat beneficiaries. A total margin, in contrast, reflects the financial performance of the entire facility across all lines of business (such as ancillary and therapy services, hospice, and home health care) and all payers.

Industry representatives contend that Medicare payments should subsidize payments from other payers, in large part Medicaid. However, the Commission believes such cross-subsidization is not advisable for several reasons. First, a cross-subsidization policy would use a minority share of Medicare payments to underwrite a majority share of states' Medicaid payments. On average, Medicare payments account for less than a quarter of revenues to freestanding SNFs.

Second, raising Medicare rates to supplement low Medicaid payments would result in poorly targeted subsidies. Facilities with high shares of Medicare payments—presumably the facilities that need revenues the least—would receive the most in subsidies from the higher Medicare payments, while facilities with low Medicare shares—presumably the facilities with the greatest need—would receive the smallest subsidies. Third, increased Medicare payment rates could encourage states to further reduce their Medicaid payments and, in turn, create pressure to raise Medicare rates. In addition, a Medicare subsidy would have an uneven impact on payments, given the variation across states in the level and method of paying for nursing home care. In states where Medicaid payments were adequate, the subsidy would add to excessive payments. Last, higher Medicare payments could further encourage providers to select patients based on payer source or to rehospitalize dual-eligible patients so that they qualified for a Medicare-covered, higher payment stay. ■

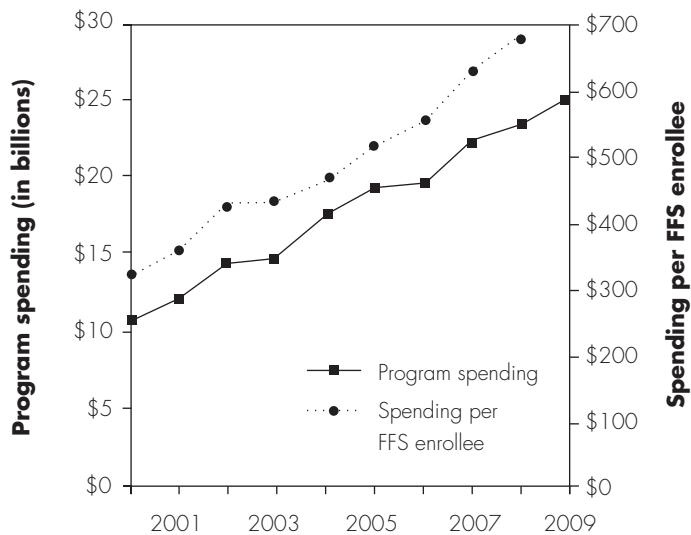
deals and increasingly require that a borrower use them for their working capital loans. Ideal borrowers were described as those with multiple facilities (10 to 15), located in multiple states, and with ancillary businesses—all ways to spread risk.

Lending by the Department of Housing and Urban Development (HUD) has tempered an otherwise sluggish lending environment. In 2009, HUD's lending dramatically increased as a result of an overhaul of its federally insured mortgages program for nursing homes under Section 232/223.¹³ Last year, we reported on the streamlined and simplified loan application process aimed at standardizing and speeding up the process. Between 2008 and 2009, the number of HUD-financed projects increased 35 percent (to 255 projects) and HUD's insured mortgage amounts increased 61 percent, totaling more than \$2 billion in 2009 (Department of Housing and Urban Development 2009). HUD reports 600 to 700 projects in its queue as of November 2009, making it the sector's

busiest lender. The high demand for the program has resulted in extended delays until the agency can begin to process an application, though the agency plans to more than double the number of underwriters it employs to keep pace with the number of applications. The government will continue to be a major lender in 2010 (Ambrose 2009).

Medicare payments and providers' costs: Medicare margins continue to increase

Between 2007 and 2008, Medicare payments increased faster than Medicare costs, resulting in an aggregate 2008 Medicare margin of 16.5 percent. Medicare margins continued to vary more than twofold by ownership group. Examining the range in financial performance, we found that high-margin SNFs had considerably lower costs and, to a smaller extent, higher payments than low-margin SNFs. We also found that some SNFs consistently furnished relatively low-cost, high-quality care and had substantial Medicare margins.

**FIGURE
3A-7****Medicare's payments to skilled nursing facilities continue to grow**

Note: FFS (fee-for-service). Years are fiscal years. FFS enrollee count for 2009 is not available.

Source: CMS, Office of the Actuary, 2009.

Program spending in 2009 topped \$25 billion

In fiscal year 2009, spending for SNF services was \$25.5 billion, up more than 6 percent from 2008 (Figure 3A-7). This rate of increase was slower than for the previous two years, yet spending increases still averaged 10.6 percent annually between 2000 and 2009. The slower growth rate was due, in part, to the slowdown in the shift in case-mix groups from rehabilitation-only to rehabilitation plus extensive services groups, the highest payment groups. Between 2006 and 2007, the number of days classified into rehabilitation plus extensive services groups grew 31 percent; between 2008 and 2009, this growth slowed to about 9 percent. Another factor in the constrained spending growth rate was the decline in the number of FFS enrollees as more beneficiaries enrolled in MA plans. Spending by MA plans on SNFs is not included in the SNF spending totals. Even with declining FFS enrollment, however, spending increases averaged more than 10 percent a year since 2000.

SNF margins continue to grow

SNF aggregate margins continued to increase, making 2008 the eighth consecutive year with margins above 10 percent (the 2001 margin—17.6 percent—is not shown) (Table 3A-4). In 2008, the aggregate Medicare margin

**TABLE
3A-4****Freestanding SNF Medicare margins continue to increase**

	2002	2003	2004	2005	2006	2007	2008 ^a
Number of freestanding SNFs	11,015	10,854	11,161	11,190	11,284	11,567	12,401 ^b
Margin, by type of SNF							
All	17.4%	10.8%	13.7%	12.9%	13.3%	14.7%	16.5%
Urban	16.8	10.2	13.1	12.4	13.1	14.5	16.1
Rural	20.4	14.0	16.3	15.4	14.6	15.7	18.3
For profit	19.6	13.4	16.2	15.2	15.8	17.4	19.0
Nonprofit	8.7	1.3	3.5	4.2	3.3	4.0	7.0
Government ^c	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: SNF (skilled nursing facility), N/A (not available).

^a In 2009, we updated our method of calculating Medicare margins using more recent data on the cost differences between Medicare and other patients. This update accounted for one-third of the difference in the margins between 2007 and 2008.

^b CMS reports that an increased number of SNFs filed cost reports in 2008. This increase is attributed to the consolidation of audit operations at Medicare contractors that resulted in a change in the number of "low utilization" cost reports filed by providers. As a result, more SNFs met MedPAC's data screens to be included in the analysis. The expanded number of SNFs did not affect the 2008 margin. Using the same 2007 cohort of SNFs, the 2008 margin is also 16.5 percent.

^c Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of freestanding SNF cost reports.

**TABLE
3A-5****Freestanding SNF margins and costs vary considerably in 2008**

Measure	Percentile				
	10th	25th	50th	75th	90th
Medicare margin	-6.6%	7.4%	17.9%	26.2%	33.1%
Standardized Medicare cost per day	\$334	\$293	\$259	\$229	\$203

Note: SNF (skilled nursing facility). Costs were standardized for differences in wages and case mix (using the nursing case-mix index).

Source: MedPAC analysis of freestanding SNF cost reports for 2008.

for freestanding SNFs was 16.5 percent, 1.8 percentage points higher than the margin in 2007. From 2007 to 2008, Medicare costs per day grew more slowly than payments per day (3.4 percent compared with 5.6 percent). The high growth in payments reflects the increased share of days in the highest payment rehabilitation RUGs.

A factor contributing to the large increase in the Medicare margin between 2007 and 2008 is an update to the method we use to account for the higher nursing costs of treating Medicare patients compared with non-Medicare patients.¹⁴ Using more recent patient assessment information, we found that our former adjustment method was overstating the cost difference between Medicare and non-Medicare patients and would, in turn, understate Medicare margins. Had the prior years' adjustment been used, Medicare margins for 2008 would have been 15.9 percent.¹⁵ With more recent information, we believe the revised adjustment more accurately represents Medicare margins.

Like other sectors, the financial performance of freestanding SNFs continued to vary widely. Consistent with previous years, rural SNFs had higher Medicare margins than their urban counterparts and the disparity between for-profit and nonprofit facilities was large. The Medicare margin for for-profit SNFs was 19.0 percent, compared with 7.0 percent for nonprofit facilities. One-half of freestanding SNFs had Medicare margins of 17.9 percent or more, while one-quarter of them had Medicare margins at or below 7.4 percent and one-quarter had Medicare margins of 26.2 percent or higher (Table 3A-5). About 16 percent of the freestanding facilities reported negative Medicare margins, a small decrease from 2007.

A key factor in the difference in Medicare margins across facilities is cost per day. One-quarter of SNFs had costs

(adjusted for differences in case mix and wages) at or below \$229 per day, while one-quarter had costs that equaled or exceeded \$293 a day—a 28 percent difference. There were also differences by ownership. At the median, nonprofit SNFs had costs per day (adjusted for differences in case mix) that were 8 percent higher than in for-profit SNFs. Additional analysis of the differences between SNFs with high and low margins is described on p. 187.

The aggregate total margin for freestanding SNFs in 2008 was 1.9 percent, reflecting lower Medicaid payments that drive many facilities' total financial performance. This industry's overall financial health is shaped by state policies on the level of Medicaid payments and the ease of entry into a market (e.g., whether there is a requirement for a certificate of need). The Commission has a long-standing position that subsidizing Medicaid payment levels is inadvisable for many reasons and that the Medicare margin is the appropriate measure of the adequacy of the program's payments (see text box, p. 184). An additional factor in a facility's total financial performance is the share of revenues from private payers (generally considered favorable) and other lines of business (such as ancillary, home health, and hospice services) that contribute to a facility's total financial performance. Annual reports from publicly traded companies indicate that expanding private payer shares and hospice services are strategies actively pursued by some facilities (Extendicare 2009, Kindred 2008, Sun Healthcare Group 2009).

Hospital-based facilities continued to have very negative margins (-74 percent), in large part reflecting their higher daily costs and shorter stays (averaging less than half the length of stay in freestanding facilities). Their higher costs are a function of their higher staffing levels, larger mix of professional staff, and generally higher wage rates

(hospital-based SNFs typically pay SNF staff the same rates as their hospital employees). The higher NTA costs in hospitals may indicate that physicians view SNF stays as an extension of the inpatient stay, with their practices not fully adjusting to the fact that the patient has moved into a lower intensity, post-acute setting. In addition, hospital-based SNFs have higher overhead costs per day than freestanding SNFs, in part because they are smaller and their administrative costs are spread over fewer patients. Finally, the higher NTA costs of hospital-based SNFs may capture differences in case mix. Because patients requiring high-cost NTA services can be hard to place, they may remain in some hospital-based facilities. Our recommended changes to the SNF PPS would increase payments to hospital-based facilities by an estimated 20 percent, given the mix of patients they treat.

The Commission has examined hospital-based SNFs and their impact on hospitals' financial performance. We interviewed hospital administrators to understand their decisions to keep their SNF units open despite their low SNF margins (Medicare Payment Advisory Commission 2007). We learned that the decision to stay open or to close was multifaceted. Administrators considered the SNF units in the context of the hospital's overall business model and the SNF's impact on the inpatient margin, the inpatient length of stay, and freeing up inpatient capacity to treat additional acute care patients. Our analysis of 2008 hospital cost reports found that SNF services contributed to the bottom line financial performance of the hospitals. Hospitals with SNFs had higher inpatient Medicare margins and higher overall Medicare margins (a margin that considers all lines of business) than hospitals without SNFs.

Comparing SNFs with high and low margins

To help evaluate the range in SNF margins, we compared the characteristics of freestanding facilities with high and low Medicare margins. We found that lower daily costs and higher payments contributed to the differences in financial performance between SNFs with the lowest and highest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins). Low-margin SNFs had case-mix-adjusted costs per day that were 42 percent higher (\$312 vs. \$219) and ancillary costs per day that were 40 percent higher (\$126 vs. \$96) than high-margin SNFs (Table 3A-6). The higher daily costs of the low-margin SNFs are explained partly by their lower average daily census (with fewer economies of scale) and shorter stays (over which to spread their fixed costs)

**TABLE
3A-6**

Freestanding SNFs in top quartile of Medicare margins in 2007 had much lower costs

Characteristic	High-margin quartile	Low-margin quartile
Medicare margin	31.6%	-3.0%
Costs per day		
Total	\$219	\$312
Ancillary	\$96	\$126
Administration and general cost (overhead)	\$27	\$38
Average daily census (patients)	86	73
Length of stay (days)	43	38
Medicare payment per day	\$402	\$373
Share of days, by case-mix group		
Ultra-high and very high rehabilitation	62%	45%
Clinically complex and special care	4%	6%
Medicare share of days	12.7%	11.0%
Share of SNFs, by type		
Percent for profit	89%	58%
Percent urban	70%	73%

Note: SNF (skilled nursing facility). Values shown are medians for the quartile. High-margin quartile SNFs were in the top 25 percent of the distribution of Medicare margins. Low-margin quartile SNFs were in the bottom 25 percent of the distribution of Medicare margins. Total and ancillary costs per day have been adjusted for differences in area wages and case mix (using the nursing component's relative weights).

Source: MedPAC analysis of freestanding cost reports.

than high-margin SNFs. The median SNF occupancy rates of facilities with high and low margins did not vary. Unmeasured differences in patient mix could also explain some of the cost differences.

On the revenue side, high-margin SNFs had Medicare payments that were 8 percent higher than low-margin SNFs. High-margin SNFs had much higher shares of days in the ultra-high and very high rehabilitation case-mix groups (62 percent compared with 45 percent) and lower shares of days in the less profitable case-mix groups (the clinically complex and special care groups) compared with SNFs in the low-margin quartile. These differences in revenue may also reflect the current distortions in the PPS. Our previous work found that as therapy costs increase,

Identifying skilled nursing facilities that furnish relatively low-cost, high-quality care

To be included in the group of skilled nursing facilities (SNFs) that furnished relatively low-cost, high-quality care, a SNF had to be in the lowest third of the distribution of costs per day, in the top third on one quality measure, and not in the bottom third for the other quality measure for three consecutive years (2004 through 2006). The cost per day was adjusted for differences in case mix (using the nursing component relative weights) and wages. Quality measures were risk-adjusted rates of community discharge and rehospitalization for five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge. Quality measures were calculated for all facilities with more than 25 stays.

The method we used to assess performance attempts to limit drawing incorrect conclusions about performance

based on poor data. Using three years to categorize SNFs as efficient (rather than just one year) avoids categorizing providers based on random variation or one “bad” year. In addition, we separated a SNF’s assignment to a group from examination of the group’s performance to avoid having poor data for a facility affect both its categorization and assessment of the group’s performance. Performance over three years (2004 through 2006) was used to categorize SNFs into relatively efficient and other groups, and once the groups were defined, we evaluated their performances in 2007 and 2008. Thus, a SNF’s erroneous data could result in inaccurately assigning it to a group, but because the group’s performance is assessed with data from later years, these “bad” data would not affect assessment of the group’s performance. Using this definition, we found 6 percent of SNFs provided relatively low-cost, high-quality care. ■

payments rise faster (Medicare Payment Advisory Commission 2008b). Conversely, medically complex days are relatively underpaid because of the poor targeting of payments for NTA services. High-margin SNFs had a higher average Medicare share of days than low-margin SNFs.

The ownership mixes varied considerably for high-margin and low-margin facilities. Although for-profit facilities made up two-thirds of SNFs, they made up 89 percent of the high-margin facilities. Conversely, they were underrepresented in the low-margin group. Urban facilities were slightly overrepresented in the high-margin group, making up 73 percent of this group but only 70 percent of facilities (though they made up 83 percent of payments).

The Commission has expressed concern about the differences in financial performance across facilities due to shortcomings in the PPS design. In 2008, SNFs with high Medicare margins had much higher shares of intensive therapy days and lower shares of special care and clinically complex days than SNFs with low Medicare margins. Changes to the PPS that the Commission recommended in 2008 would raise payments to hospital-

based SNFs and nonprofit SNFs and would lower payments to freestanding SNFs and for-profit SNFs.

High margins achieved by relatively low-cost SNFs furnishing high-quality care

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with an efficient provider. This year, we begin the analysis by examining the financial performance of freestanding SNFs with consistently low costs per day and high quality (see text box on definitions). To measure costs, we looked at costs per day that were adjusted for differences in area wages and case mix. To assess quality, we examined risk-adjusted rates of community discharge and potentially avoidable rehospitalizations.

Our analyses found that SNFs can have relatively low costs and provide good quality of care while maintaining high margins. Relatively efficient SNFs were less likely to be located in urban areas and more likely to be nonprofit than other freestanding SNFs. Compared with other SNFs, the relatively efficient ones had community discharge

rates that were 39 percent higher, rehospitalization rates that were 21 percent lower, and costs per day that were 17 percent lower (Table 3A-7). They also had shorter stays than other SNFs. Yet, these SNFs had margins of 24.9 percent compared with a median margin of 17.7 percent for the other SNFs. Clearly, their financial performance did not jeopardize their relatively good patient outcomes.

We recognize that a SNF may appear to be efficient in providing its own care but not when considering a patient's entire episode of care. For example, SNFs that discharge patients to other post-acute services may be efficient in their own practice but raise total program spending. Although the rehospitalization quality measure will prevent those SNFs that routinely discharge their patients back to the hospital from being considered efficient, SNFs will differ in their use of hospital services. In the future, we plan to examine the total costs of the episode of care to assess SNFs' practice patterns in a broader context.

Payments and costs for 2010

To estimate 2010 payments, the Commission considers policy changes that went into effect in 2009 and 2010, including the legislated SNF market increases. The SNF market basket, which measures price inflation for the goods and services SNFs use to produce a day of care, increased Medicare payments by 3.4 percent in 2009 and 2.2 percent in 2010. In 2009, there were no other policy changes to consider besides the projected market basket increase.

For fiscal year (FY) 2010, CMS lowered payments to account for overpayments that had resulted from implementation of new case-mix groups in 2006. As background, whenever changes to a classification system are introduced, CMS uses the best available data to make an across-the-board adjustment so that payments under the "new" case-mix groups are the same as payments would have been under the "old" case-mix groups. This year, CMS's analysis of 2006 case-mix data found that it had substantially underestimated the impact of the new groups and that the new groups had resulted in 3.3 percent overpayments, or about \$1 billion (Centers for Medicare & Medicaid Services 2009). To ensure parity between the "old" and "new" case-mix groups, CMS lowered payments to account for the overpayment. The reduction is partly offset by the market basket increase for 2010, so that payments on net were lowered by 1.1 percent, or \$360 million. We factored this reduction in payments into our estimate of 2010 payments.

**TABLE
3A-7**

**SNFs with relatively
low costs and high quality
maintained high margins**

Measure	SNFs with relatively low costs and good quality	Other
Percent of SNFs	6%	94%
Performance in 2007		
Relative*:		
Community discharge rate	1.39	1.0
Rehospitalization rate	0.79	1.0
Cost per day	0.83	1.0
Median:		
Length of stay (in days)	35	41
Medicare margin	24.6%	16.0%
Performance in 2008		
Relative* cost per day	0.85	1.00
Median:		
Length of stay (in days)	37	40
Medicare margin	24.9%	17.7%
Percent urban, 2008	64	75
Percent nonprofit, 2008	24	21
Median number of beds, 2008	99	109

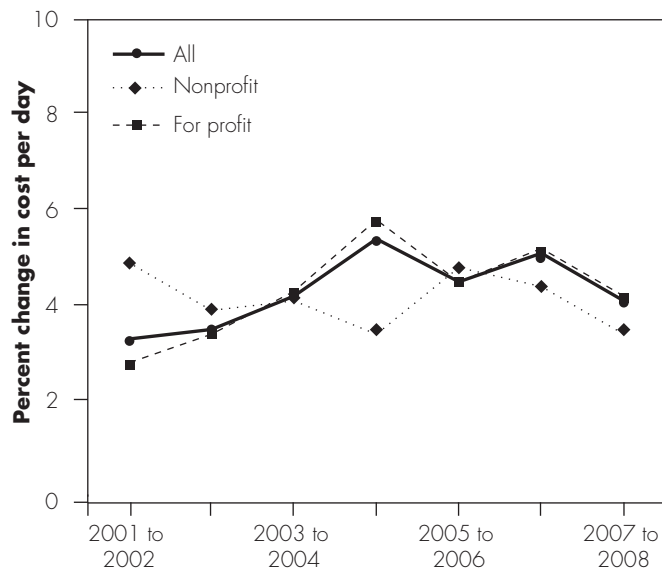
Note: SNF (skilled nursing facility). SNFs with relatively low costs and good quality were those in the lowest third of the distribution of cost per day, in the top third for one quality measure, and not in the bottom third for the other quality measure. Costs per day were standardized for differences in case mix (using the nursing component relative weights) and wages. Quality measures were rates of risk-adjusted community discharge and rehospitalization for five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge. Increases in rates of discharge to community indicate improved quality; increases in rehospitalization rates for the five conditions indicate worsening quality. Quality measures were calculated for all facilities with more than 25 stays.
*Measures are relative to the national average.

Source: MedPAC analysis of quality measures for 2004–2007 and Medicare cost report data for 2004–2008.

Our modeling of future year costs also considers recent observed cost growth for freestanding SNFs. Between 2007 and 2008, costs per day (unadjusted for case mix) grew more slowly (4.1 percent) than between 2006 and 2007 (Figure 3A-8, p. 190).¹⁶ Although freestanding for-profit facilities experienced higher average cost growth than nonprofit facilities, they continued to have lower costs per day. In 2008, the average per day cost at

**FIGURE
3A-8**

**Growth in freestanding SNF costs
per day varies by ownership**



Note: SNF (skilled nursing facility). Growth is in aggregate costs per day between two years for a cohort of facilities.

Source: MedPAC analysis of freestanding SNF cost reports.

freestanding nonprofit SNFs was 10 percent higher than the average daily cost at for-profit SNFs. Compared with for-profit facilities, nonprofit facilities' routine costs (that reflect staffing levels and mix) were 16 percent higher and their administration and general expenses were 9 percent higher, both unadjusted for differences in case mix. Differences in the mix of patients treated may explain some of these observed cost differences.

In assessing payment adequacy, the Commission considers the estimated relationship between Medicare payments and SNF costs in FY 2010. We project the SNF margin to be 10.3 percent in 2010. This estimate may be conservative for two reasons. First, it assumes that costs will increase at the actual average cost growth over the past five years (4.8 percent) and not at the market basket rate, which is lower. However, it is possible that costs may grow more slowly than the recent average rate because of the condition of the economy. Second, we have not assumed any changes in the mix of the case-mix groups that may result from revisions to the payment system. In 2011, CMS plans to implement a new classification system and other rules for counting therapy times. In aggregate, CMS will make these changes in a budget-neutral manner. Their projection does not, however, assume any behavioral offset, such

as shifts in the mix of group, concurrent, and individual therapy in reaction to the new rules.

How should Medicare payments change in 2011?

The update in current law for fiscal year 2011 is the forecasted change in input prices as measured by the SNF market basket. The market basket for SNFs in 2011 is projected to be 2.2 percent, but CMS will update this forecast before establishing payments for 2011. SNFs should be able to accommodate cost changes in fiscal year 2011 with payments held at 2010 levels.

Update recommendation

RECOMMENDATION 3A

The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2011.

RATIONALE 3A

The evidence indicates that Medicare beneficiaries continue to have access to SNF services. Under policies in current law for 2009 and 2010, we project the Medicare margin for freestanding SNFs to be 10.3 percent in 2010. SNF payments appear more than adequate to accommodate cost growth without an update.

IMPLICATIONS 3A

Spending

- This recommendation would lower program spending relative to current law by between \$250 million and \$750 million for fiscal year 2011 and by between \$1 billion and \$5 billion over five years.

Beneficiary and provider

- We do not expect an adverse impact on beneficiary access, nor do we expect the recommendation to affect providers' willingness or ability to care for Medicare beneficiaries.

The Commission considers the update recommendation to be part of the package of its SNF recommendations that together consider the level and distribution of payments. The Commission's previous recommendations regarding SNF services are listed in the text box. Of

Previous Commission skilled nursing facility recommendations

The Commission made several recommendations aimed at improving the accuracy of Medicare's payments, linking the program's payments to beneficiary outcomes, and increasing the ability to assess the value of Medicare's purchases (Medicare Payment Advisory Commission 2008a, Medicare Payment Advisory Commission 2008b).

The Congress should require the Secretary to revise the skilled nursing facility (SNF) prospective payment system (PPS) by:

- **adding a separate nontherapy ancillary (NTA) component,**
- **replacing the therapy component with one that establishes payments based on predicted patient care needs, and**
- **adopting an outlier policy.**

Compared with the existing PPS, the revised design would better target payments to stays with high NTA costs, more accurately calibrate therapy payments to therapy costs, and offer some financial protection to SNFs that treat stays with exceptionally high ancillary costs.

The Congress should establish a quality incentive payment policy for SNFs in Medicare.

Linking payments to beneficiary outcomes could help improve SNF quality and redistribute payments from low-quality to high-quality providers. Measures, such as rehospitalization rates, would encourage providers to improve their coordination of care across sites. The Commission has also discussed the need to synchronize the payment policies for hospitals and SNFs with high readmission rates. To make these policies parallel, SNFs would be penalized for having high readmission rates (without budget neutrality assumed in a quality incentive payment policy). If aligned, hospitals and SNFs would both have incentives to prevent premature discharge from hospitals, ensure good care transitions to SNFs, and furnish appropriate care in the SNF to prevent potentially avoidable rehospitalizations.

To improve quality measurement for SNFs, the Secretary should:

- **add the risk-adjusted rates of potentially avoidable rehospitalizations and community discharge to its publicly reported post-acute care quality measures;**
- **revise the pain, pressure ulcer, and delirium measures currently reported on CMS's Nursing Home Compare website; and**
- **require SNFs to conduct patient assessments at admission and discharge.**

These changes would improve accuracy of the public reporting of SNF quality and ensure that the measures reflect the care provided to all SNF patients. Gathering assessment information at discharge will allow the program to evaluate changes in patient conditions and tie them to the services furnished to beneficiaries.

The Secretary should direct SNFs to report more accurate diagnostic and service-use information by requiring that:

- **claims include detailed diagnosis information and dates of service,**
- **services furnished since admission to the SNF be recorded separately in the patient assessment, and**
- **SNFs report their nursing costs in the Medicare cost report.**

Revisions to the patient assessment instrument CMS plans to implement in fiscal year 2011 will require SNFs to separately record services furnished since admission to the SNF. Better information would improve payment accuracy and enable policymakers to assess the value of SNF care. ■

particular relevance to the update discussion are two recommendations previously made by the Commission that would redistribute payments across facilities: to revise the PPS and establish a pay-for-performance program (Medicare Payment Advisory Commission 2008a). Although updates can help control overall spending, changes beyond those already planned by CMS are required to more accurately pay for NTA services and medically complex care. The Commission has also

recommended that payments be tied to the quality of care facilities furnish. A quality incentive payment policy would redistribute payments toward facilities that provide good quality (or are improving) and away from facilities with poor quality. The Commission urges the Congress to implement all three recommendations so that spending increases are limited and payments are distributed equitably across all types of cases and the facilities that treat them. ■

Endnotes

- 1 For services to be covered, the SNF must meet Medicare's conditions of participation (COPs) and agree to accept Medicare's payment rates. Medicare's COPs relate to many aspects of staffing and care delivery, such as requiring a registered nurse in the facility for 8 consecutive hours per day and licensed nurse coverage 24 hours a day, providing physical and occupational therapy services as delineated in each patient's plan of care, and providing or arranging for physician services 24 hours a day in case of an emergency.
- 2 The program pays separately for some services, including certain chemotherapy drugs, customized orthotics and prosthetics, ambulance services, dialysis, outpatient and emergency services furnished in a hospital, computed tomography, magnetic resonance imaging, radiation therapy, and cardiac catheterizations. A more complete description of the SNF PPS is available at: http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_SNF.pdf.
- 3 For example, the nursing component for patients in the highest extensive services case-mix groups will increase more than 90 percent and payments for patients in the highest special care case-mix group (such as patients with chronic obstructive pulmonary disease) will increase almost 80 percent.
- 4 A facility may begin to participate in the program but may not be "new." For example, a facility could have a change in ownership (and be assigned a new provider number) or in its certification status from Medicaid-only to dually certified for the Medicaid and Medicare programs. We use the number of SNFs that terminated their participation in the Medicare program as a proxy for the facilities that closed.
- 5 In 2007, SNFs with the highest shares of clinically complex admissions (the top quartile) treated 61 percent of these patients compared with SNFs with the highest rehabilitation shares (they treated 33 percent of rehabilitation admissions).
- 6 In 2007, African American beneficiaries made up 16 percent of medically complex admissions and 10 percent of all SNF admissions.
- 7 In its analysis of staff resources associated with caring for different types of patients, CMS found that services furnished during the prior hospital stay were not an accurate proxy for medical complexity (Centers for Medicare & Medicaid Services 2009). As a result, beginning with implementation of the new case-mix groups in 2011, services furnished during the prior hospital stay will no longer be considered when classifying patients in case-mix groups. Furthermore, CMS will revise the definition of extensive services, eliminating IV medications from the list. CMS found that the staff time associated with IV medications was consistent with clinically complex patients but not with patients in the extensive services category.
- 8 The 60 percent rule attempts to identify patients who need intensive rehabilitation services provided by IRFs. CMS established criteria (identifying 13 specific conditions) and requires that at least 60 percent of the patients treated by IRFs have one of those conditions. In 2004, CMS revised its criteria, clarifying that only a subset of patients with major joint replacements, the largest category of IRF admission at the time, would count toward the threshold then in place. The Medicare, Medicaid, and SCHIP Extension Act of 2007 rolled back and permanently set the compliance threshold to 60 percent. It also put into law CMS's discretionary policy allowing IRFs to count patients whose comorbidities (rather than primary diagnoses) were among the 13 conditions toward the compliance threshold.
- 9 The average Barthel score (a measure of functional independence) and the cognitive performance score each declined 2 percent. In both scales, lower scores indicate worse status.
- 10 Every beneficiary is assessed a risk score each year to predict a beneficiary's spending in the next year based on diagnostic and demographic information in the current year. The risk score considers hospital and physician diagnoses, the beneficiary's age and sex, institutional status, Medicaid enrollment (a poverty indicator), and an indicator of original disabled status (Pope et al. 2004).
- 11 For example, CMS estimated that payments to hospital-based facilities will decrease slightly (–1.4 percent for urban hospital-based facilities and –0.8 percent for rural hospital-based facilities) and payments to nonprofit SNFs will increase 0.2 percent.
- 12 The community discharge and potentially avoidable rehospitalization rates have been risk adjusted by using many resident-level factors. Both models include a derived comorbidity index, a Barthel score (a measure of functional independence), the cognitive performance scale (a measure of cognitive impairment), and the presence of advance directives. The community discharge model also includes the rehabilitation case-mix hierarchy (e.g., very high or medium), selected clinical conditions associated with community discharge (depression, schizophrenia), and whether the patient was married. The rehospitalization model also includes select patient needs and characteristics associated with hospitalization (e.g., indwelling catheter, feeding tube,

and pressure ulcers). This risk-adjustment methodology was updated in 2009 to better reflect the relative importance of comorbid conditions, among other improvements (Kramer et al. 2009). Data for this risk-adjustment methodology come from Medicare SNF and hospital claims, the MDS, and the Online Survey Certification and Reporting System.

- 13 The HUD Section 232 program finances new or substantial reconstruction of nursing homes. The Section 232/223(f) program finances the refinancing or purchase of existing facilities.
- 14 Medicare patients require more nursing resources than non-Medicare patients. However, the Medicare cost report does not require facilities to report their nursing costs or the routine costs (which include nursing costs) attributable to Medicare beneficiaries. To estimate how much higher Medicare nursing costs are relative to other patients, we compared the nursing relative weights of the case-mix groups that Medicare and non-Medicare patients were assigned during 2007 and 2008 (Plotzke and White 2009) We found that the average nursing component's relative weight was 34.5 percent (in 2007) and

34.6 percent (in 2008) higher for Medicare patients than for non-Medicare patients. The previous difference (based on 2001 and 2002 patient assessments) was 38 percent. We then adjusted an estimate of nursing costs by the difference in nursing weights to reflect the higher costs to care for Medicare patients. Because the difference between Medicare and non-Medicare patients is smaller than it had been, Medicare costs were lower, which increased the Medicare margin.

- 15 The patient assessments for 2007 also indicated that the adjustment was overstating the difference in nursing costs between Medicare and non-Medicare patients. Had the more accurate adjustment been applied in 2007, the Medicare margin would have been 15.3 and not the reported 14.7 percent.
- 16 The cost growth in Figure 3A-8 differs from the rate reported on page 186 because the figure uses a consistent cohort for each two-year period for the calculation.

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3B

SECTION

Home health services

R E C O M M E N D A T I O N S

3B-1 The Congress should eliminate the market basket update for 2011 and direct the Secretary to rebase rates for home health care services to reflect the average cost of providing care.

.....
COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

3B-2A The Congress should direct the Secretary to expeditiously modify the home health payment system to protect beneficiaries from stinting or lower quality of care in response to rebasing. The approaches should include risk corridors and blended payments that mix prospective payment with elements of cost-based reimbursement.

.....
COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

3B-2B The Secretary should identify categories of patients who are likely to receive the greatest clinical benefit from home health care and develop outcomes measures that evaluate the quality of care for each category of patient.

.....
COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

3B-3 The Congress should direct the Secretary to review home health agencies that exhibit unusual patterns of claims for payment. The Congress should provide the authority to the Secretary to implement safeguards, such as a moratorium on new providers, prior authorization, or suspension of prompt payment requirements, in areas that appear to be high risk.

.....
COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

3B

SECTION

Home health services

Section summary

Home health agencies provide services to beneficiaries who are homebound and need skilled care (nursing or therapy). In 2008, about 3.2 million Medicare beneficiaries received home health services from 10,026 home health agencies. Medicare spent \$17 billion on home health services in 2008.

Assessment of payment adequacy

The indicators of payment adequacy for home health, discussed below, are mostly positive. Concluding that home health payments need to be reduced significantly, the Commission recommends that the Congress eliminate the market basket update for 2011 and direct the Secretary to rebase rates for home health care services to reflect the average cost of providing care.

Beneficiaries' access to care—Access to home health care is widespread, with 99 percent of beneficiaries living in a ZIP code where a Medicare home health agency operates and 97 percent living in an area with two or more agencies.

- **Capacity and supply of providers**—The number of agencies continues to increase, with about 500 new ones in 2009. The total number of agencies exceeds 10,400, approaching the peak of 10,917 agencies in 1997. Most new agencies since 2002 are in Texas, Florida, and Michigan. There are

In this section

- Are Medicare payments adequate in 2010?
.....
- How should Medicare payments change in 2011?
.....
- Future refinements to the home health benefit
.....

concerns that growth in certain areas—including Miami–Dade County, Florida—is related to increased fraud and abuse by some providers.

- ***Volume of services***—The volume of services continues to rise. More beneficiaries are receiving home care, and the number of episodes per beneficiary continues to rise.

Quality of care—The Home Health Compare measures for 2009 are similar to those for previous years, showing improvement in the functional measures and mostly unchanged rates of adverse events. However, the Commission has begun to raise concerns about the current measures and believes further study is needed before it can draw definitive conclusions about quality.

Providers' access to capital—Home health agencies are smaller and do not have the capital-intensive needs found in other health care sectors. According to capital market analysts, the major publicly traded for-profit home health companies have access to capital markets for their credit needs. For smaller agencies, the significant number of new agencies in 2009 suggests that they have access to capital necessary for start-up.

Medicare payments and providers' costs—Payments have consistently and substantially exceeded costs in the home health prospective payment system. Medicare margins for freestanding providers in 2008 were 17.4 percent, which is the average for the period 2001–2007. Two factors have contributed to payments exceeding costs: fewer services are delivered than is assumed in Medicare's rates and cost growth has been lower than what is assumed in the market basket. In addition to significantly reduced payments, the Commission calls for strengthening program integrity and quality measurement.

Related issues: Further refinements to the home health benefit

To monitor the effect of recent changes in Medicare payment policy for home health services, the Commission intends to examine several areas that warrant attention. The Commission will examine: (1) the factors driving growth in the length of home health spells—of particular concern as recent policy changes raised payments for spells with multiple episodes; (2) whether payment-related thresholds for therapy services in effect in 2008 have created better incentives for aligning therapy provision with patient needs; (3) the extent to which payment refinements continue to be biased in favor of cases with high resource use while undervaluing cases with low resource use; and (4) the adequacy of current quality measures, the accuracy of risk adjustment, and efforts to develop measures that more directly capture the quality of care provided. We also plan to examine methods for strengthening physician accountability. ■

Background

Medicare home health care consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide service, and medical social work provided to beneficiaries in their homes. To be eligible for Medicare's home health benefit, beneficiaries must need part-time (fewer than eight hours per day) or intermittent skilled care to treat their illnesses or injuries and must be unable to leave their homes without considerable effort. Medicare requires that a physician certify a patient's eligibility for home health care and that a patient receiving service be under the care of a physician. Medicare does not require copayments or a deductible for home health services.

Unlike its coverage for skilled nursing facilities, Medicare does not require a hospital stay to qualify for home health care. The share of beneficiaries admitted from the community compared with admissions after a facility stay has increased significantly since 2000. In 2007, about 39 percent of home health episodes were preceded by a stay in an inpatient or post-acute care facility (acute care hospital, skilled nursing facility, inpatient rehabilitation facility, or long-term care hospital).

Under a prospective payment system (PPS) implemented in 2000, Medicare pays for home health care in 60-day episodes. Patients who complete their course of care before 60 days have passed are discharged and Medicare pays for the episode. Payments for an episode are adjusted for patient severity by a case mix that is based on patients' clinical and functional characteristics and some of the services they use. If they need additional covered home health services at the end of the initial 60-day episode, another episode commences and Medicare pays for an additional episode. Beneficiaries may receive an unlimited number of consecutive home health episodes as long as they meet the eligibility standards for the benefit.

Medicare implemented significant refinements to the home health PPS in 2008 (Medicare Payment Advisory Commission 2007). The revised system sets payments based on the number of therapy visits and an episode's timing in a sequence of consecutive episodes in addition to the patient's clinical and functional characteristics. The Commission's analysis of the changes is discussed in our March 2008 report. (An overview of the home health PPS is available at http://medpac.gov/documents/MedPAC_Payment_Basics_09_HHA.pdf.)

Medicare spending for home health fluctuated in the 1990s but has increased rapidly since 2000

The home health benefit has changed substantially since the 1980s. Implementation of the inpatient PPS in 1983 led to increased use of home health services as hospital lengths of stay decreased. Medicare tightened coverage of some services, but the courts overturned these curbs in 1988. After this change, the number of agencies, users, and services expanded rapidly in the early 1990s. Between 1990 and 1995, the number of annual users increased by 75 percent and the number of visits more than tripled to about 250 million a year. Spending increased from \$3.7 billion in 1990 to \$15.4 billion in 1995. As the rates of use and lengths of stay increased, there was concern that the benefit was serving more as a long-term care benefit (Government Accountability Office 1996). Further, many of the services provided were believed to be inappropriate or improper; for example, in one analysis of 1995–1996 data the Office of Inspector General (OIG) found that about 40 percent of the Medicare home health claims paid did not meet Medicare requirements for reimbursement (Office of Inspector General 1997).

The trends of the early 1990s prompted increased program integrity actions, refinements to eligibility standards, and replacement of the cost-based payment system with a PPS in 2000. The first initiative was Operation Restore Trust, which reviewed payments of home health agencies (HHAs) and other providers to recover inappropriate or fraudulent payments. The second major change was implementation of the interim payment system (IPS) in October 1997, which cut reimbursement levels significantly. Between 1997 and 2000, the number of beneficiaries using home health services fell by about 1 million, and the number of visits fell by 65 percent (Table 3B-1, p. 202). Total spending for home health services declined by 52 percent. IPS also had a swift effect on the supply of agencies, and by 2000 the number of agencies had fallen by 31 percent.

In October 2000, CMS implemented a PPS, and the composition of the services provided under the benefit changed significantly. Between 2000 and 2008, home health aide visits fell from about 30 percent to about 18 percent of total visits. In addition, the share of therapy visits increased from about 19 percent in 2000 to 26 percent in 2008.

The steep declines in services under the IPS do not appear to have adversely affected the quality of care beneficiaries

**TABLE
3B-1****Changes in home health utilization**

	1997	2000	2008	Percent change	
				1997–2000	2000–2008
Agencies	10,917	7,528	10,026	–31%	33%
Total spending (in billions)	\$17.7	\$8.5	\$16.9	–52	99
Users (in millions)	3.6	2.5	3.2	–31	28
Number of visits (in millions)	258.2	90.6	117.8	–65	30
Visit type (percent of total)					
Skilled nursing	41%	49%	55%	20	12
Home health aide	48	31	18	–37	–41
Therapy	10	19	26	101	11
Medical social services	1	1	1	1	–30
Visits per user	73	37	37	–49	1
Percent of FFS beneficiaries who used home health	10.5%	7.4%	9.1%	–30	24

Note: FFS (fee-for-service).

Source: Home health standard analytical file; Health Care Financing Review, Medicare and Medicaid Statistical Supplement, 2002; and Office of the Actuary, CMS.

received; one analysis found that patient satisfaction with home health services was mostly unchanged in this period (McCall et al. 2004). An analysis of all the Balanced Budget Act of 1997 (BBA) changes related to post-acute care, including the home health IPS and changes for other post-acute care sectors, concluded that the rate of adverse events generally improved or did not worsen when IPS was in effect (McCall et al. 2003). A study by the Commission also concluded that the quality of care had not declined between IPS and PPS (Medicare Payment Advisory Commission 2004). The similarity in quality of care under IPS and PPS, despite the substantial decline in visits per beneficiary, suggests that the payment reductions in the BBA led agencies to reduce costs without compromising patient care.

Although the changes in the BBA addressed some of the program integrity problems in the home health benefit, payments under the PPS have generally been more than adequate. Margins averaged 17.4 percent between 2001 and 2007. This consistent pattern of high margins indicates that Medicare payments have been well in excess of costs, even in years when the annual payment update has been reduced or eliminated (Figure 3B-1).

Setting policy to define the home health benefit is challenging

Policymakers have always struggled to define the role of the home health benefit in Medicare (Benjamin 1993). From the outset, there was a concern that setting too narrow a policy could result in beneficiaries using other, more expensive, services, while a policy that was too broad could lead to wasteful or ineffective use of home health care (Feder and Lambrew 1996). Medicare relies on the skilled care and homebound requirements as primary determinants of home health eligibility, but these requirements provide limited guidance.

An additional challenge is the variability in services home health patients receive. Past experience indicates that home health providers respond swiftly to incentives in the payment system, as evidenced by the changes in utilization between 1997 and 2000. The fact that payment policy is such a significant factor underscores the Commission's concerns that the home health benefit is ill defined. Understanding which services provide the most benefit would permit development of payment incentives that encourage use of appropriate types of care.

The current benefit relies on the patient's physician to determine appropriateness. However, providers may not always have the information they need to make the best decision. There is overlap in the types of patients and services provided by home health and other post-acute care providers, and it is not always clear which patients belong in home health or another setting. In addition, the benefit's coverage standards are considered ambiguous even by home health practitioners, and agencies appear to be inconsistent in how they apply them (Brega et al. 2002, Cheh et al. 2007). Improved guidelines that more specifically identify the patients most appropriate for home health care would ease administrative confusion and facilitate more appropriate use of the benefit.

Better guidelines might also address some of the regional variation in home health care the Commission has identified in past work (Medicare Payment Advisory Commission 2009). The broad regional variations suggest that local health care systems have different approaches to home health utilization and raise the possibility that some approaches may be more effective than others. Identifying the patients who most benefit from home health care and the services they would benefit from could help to bring more uniformity to use of the benefit.

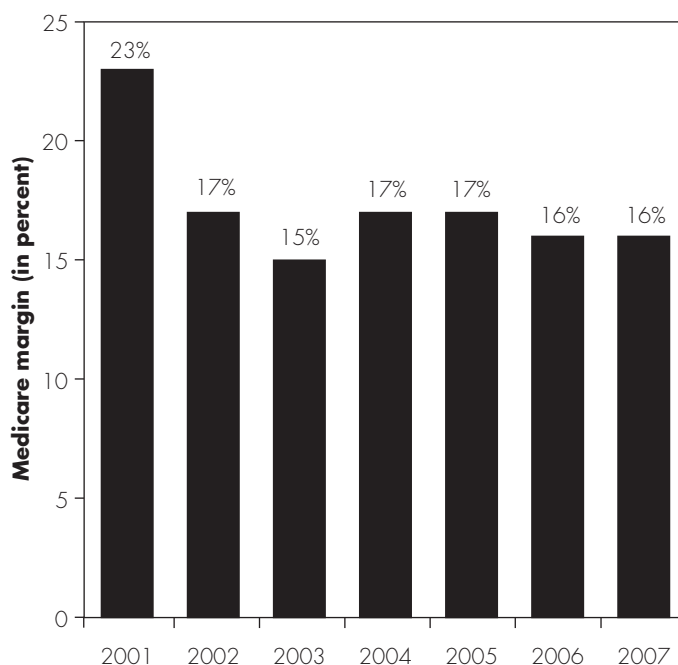
Program integrity issues in the home health care benefit

Similar to the problems that occurred in the 1990s, home health care appears to be experiencing fraud and abuse issues that are significantly increasing spending on home health care. The number of agencies has increased dramatically in areas that have generated program integrity concerns in the past—including the states of California, Texas, and Florida. Officials became suspicious of outlier claims in 2007 when 60 percent of all outlier payments nationwide were made to providers in Miami-Dade County, Florida. However, the concerns about home health fraud and abuse reach beyond Miami-Dade County and outliers. Federal authorities are investigating or prosecuting home-health-related fraud cases in a number of areas for a range of alleged offenses (Department of Health and Human Services and Department of Justice 2009). These cases include billing for services not provided, attempting to bribe federal officials, and paying kickbacks to recruit patients.

So far, CMS has conducted three policy initiatives aimed at home health fraud. First, it required home health providers in Harris County, Texas, and Los Angeles, California, and some counties adjacent to Los Angeles to

**FIGURE
3B-1**

Medicare has paid home health agencies significantly more than cost under PPS



Note: PPS (prospective payment system).

Source: MedPAC analysis of home health cost reports, 2001–2008.

re-enroll in Medicare. Under this initiative, agencies had to prove that they met Medicare's standards for program enrollment and were visited by a Medicare contractor to verify the establishment's existence. Second, CMS implemented a number of safeguards to curtail fraudulent payments for outlier episodes paid to agencies in Miami-Dade County. Finally, CMS limited outlier payments to no more than 10 percent of an agency's Medicare revenue.

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs efficient providers incur and how much providers' costs should change in the coming year (2011), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of home health providers and changes over time in the

**TABLE
3B-2****Number of agencies continues to rise**

	2002	2003	2004	2005	2006	2007	2008	2009	Average annual percent change	
									2002–2008	2008–2009
Number of agencies	7,056	7,342	7,803	8,313	8,954	9,403	10,026	10,422	6%	4%
Agencies that opened	399	562	656	693	828	624	763	546	N/A	N/A
Agencies that closed	276	195	183	187	175	140	150	70	N/A	N/A
Number of agencies per 10,000 beneficiaries	2.0	2.0	2.1	2.3	2.5	2.6	2.9	3.0	6%	4%

Note: N/A (not applicable).

Source: CMS's Providing Data Quickly database and 2009 trustees' report.

volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and providers' costs. Overall, the Medicare payment adequacy indicators for HHAs are mostly positive.

Beneficiaries' access to care: Most beneficiaries have access to two or more HHAs

Supply and volume indicators show that beneficiaries have broad access to home health services. Most beneficiaries live in an area served by home health providers, similar to the Commission's findings in prior years. Nearly all—99 percent—beneficiaries live in a ZIP code served by one HHA and 97 percent live in an area with two or more agencies.

Our measure of access is based on data collected and maintained as part of CMS's Home Health Compare database as of October 2009. The service areas listed in the database are postal ZIP codes where an agency provided service in the past 12 months. This definition may overestimate access because agencies need not serve the entire ZIP code to be counted as serving it. On the other hand, this definition may underestimate access if HHAs are willing to serve certain ZIPs but did not receive any requests from those areas in the preceding 12 months.

Capacity and supply of providers: Agency participation is approaching its previous high mark

The number of providers has grown significantly under PPS, increasing by about 50 percent since 2002 to 10,422 in 2009 (Table 3B-2). While still below the peak of 10,917

agencies in 1997, the number of agencies has increased by an average of about 480 agencies a year since 2002. Six states account for 90 percent of the increase in agencies since 2002 (Florida, Texas, California, Michigan, Illinois, and Ohio). The top three states (Florida, Texas, and Michigan) account for about 60 percent of new agencies. In addition, most of these new agencies are concentrated within one area or a few areas in each state. For example, most of the new agencies in Florida are in Miami-Dade County. In fact, concerns about fraud in Miami-Dade have become so acute that the state has implemented a moratorium on new HHA licenses, effectively preventing new Medicare agencies from serving the county because state licensure is a Medicare requirement. The state opted for a county-level moratorium because Florida, like most states, does not have a certificate-of-need process for controlling the entry of new HHAs.

The number of new agencies has risen more rapidly than the growth in number of beneficiaries. Since 2004, when 99 percent of beneficiaries lived in an area served by a HHA, the number of agencies per 10,000 FFS beneficiaries rose from 2.1 to 2.9 in 2008. Growth has been concentrated in a few areas. For example, in 2008, Texas had 7 agencies per 10,000 beneficiaries, more than double the number in the next highest state. Between 2004 and 2008, 17 states had growth in agencies per beneficiary that exceeded 10 percent, though most new agencies were concentrated in 4 states; 16 states had declines that exceeded 10 percent. However, even many of the states that experienced a decline had a large supply relative to the national average, excluding Texas. Half the states that experienced a reduction of 10 percent or more between

**TABLE
3B-3****Share of beneficiaries using home health continues to rise even as enrollment in Medicare fee-for-service declines**

	2002	2003	2004	2005	2006	2007	2008	Average annual percent change	
								2002-2007	2007-2008
FFS beneficiaries (in millions)	35.0	35.9	36.5	36.8	36.2	35.5	34.7	0.3%	-2.2%
Home health users (in millions)	2.5	2.7	2.8	3.0	3.0	3.1	3.2	4.3	1.9
Total spending (in billions)	\$9.6	\$10.1	\$11.5	\$12.9	\$14.0	\$15.7	\$16.9	10.5	7.1
Episodes (in millions)	4.1	4.5	4.8	5.2	5.5	5.8	6.1	2.8	2.1
Episodes per beneficiary	0.12	0.12	0.13	0.14	0.15	0.16	0.17	6.9	6.4
Episodes per user	1.6	1.7	1.7	1.8	1.8	1.9	1.9	7.2	4.0
Payments per:									
FFS beneficiary	\$274	\$282	\$314	\$351	\$388	\$443	\$486	10.1	9.6
Home health user	\$3,803	\$3,780	\$4,053	\$4,339	\$4,621	\$5,076	\$5,337	5.9	5.2

Note: FFS (fee-for-service).

Source: MedPAC analysis of home health standard analytical file.

2004 and 2008 still had a rate of agencies per beneficiary that exceeded the national average, excluding Texas, in 2008. However, there can be significant variation in access within a state, as even in high-supply states agencies may be concentrated in certain areas.

HHAs vary significantly in their size (patient caseload), and so the number of providers in an area is not the only measure of capacity. Also, because home health care is not facility based, agencies have the flexibility to adjust their service areas and staffing as local conditions change. Even the number of employees is not a capacity measure because many HHAs use contracted therapists, aides, and nurses to meet their patients' needs.

Program changes have not significantly curtailed agency entry

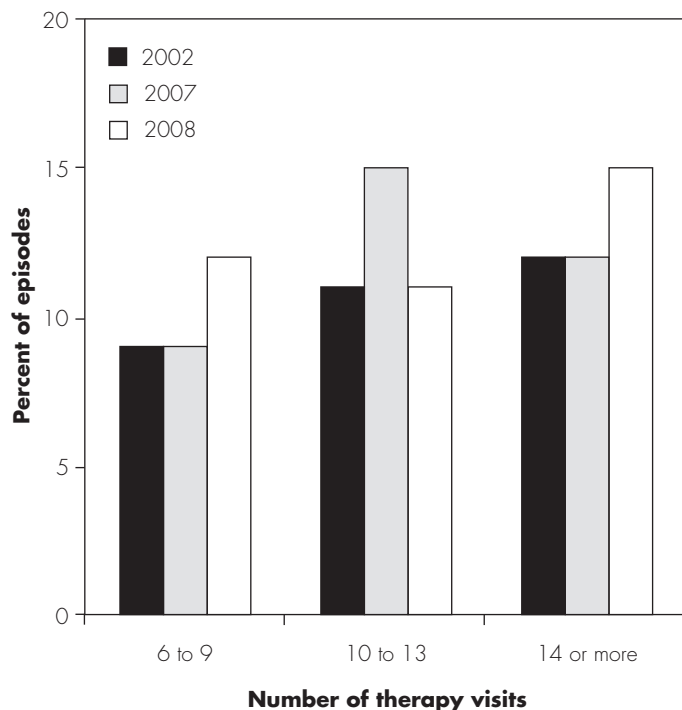
Growth in the number of agencies has led CMS to curtail funding for certification of new agencies. In 2007, CMS instructed state survey agencies to prioritize oversight of existing agencies over the certification of new ones. However, this action was not a moratorium on new agencies, as an agency wishing to become a Medicare provider could use an independent certification agency. Medicare accepts accreditation by one of these entities in lieu of a review by a state survey agency. The share of new agencies that are certified through these entities has increased significantly in the last two years. For example,

in 2009, about three-quarters of new agencies were certified through the accreditation agencies; in previous years, most new agencies were certified by state survey agencies. The low priority for federal certification of new agencies indicates that CMS is more concerned about other survey and certification activities than about the need to certify new agencies.

Recent activity indicates that the pace of entry may have slowed slightly in 2009 but also that fewer agencies are leaving the program. In 2009, 546 agencies entered the program, fewer than in the previous year. However, as of November 2009, only 70 agencies had exited, roughly half the number of agencies that left in prior years. The net effect of these two changes is that the total agency count continued to rise to 476 agencies in 2009. This number was lower than the growth in 2008 but continued the trend of significant growth in supply since 2002.

Volume of services: Episodes and rate of use continue to rise

The rate of use and volume of services have risen rapidly for home health services. Between 2002 and 2008, the number of users rose by 3.9 percent a year and the number of episodes per fee-for-service beneficiary rose by 6.8 percent a year.¹ In 2008, about 6 million episodes were provided to 3.2 million beneficiaries (Table 3B-3). About 9 percent of fee-for-service beneficiaries used home

**FIGURE
3B-2****Changes in the distribution
of therapy visits among home
health episodes, 2002–2008**

Source: MedPAC analysis of home health standard analytical file.

health in 2008, up from 7.4 percent in 2000 (Table 3B-1, p. 202). The rising volume and rate of use suggest that beneficiaries have adequate access to care.

The number of episodes per user has also increased in recent years, suggesting that beneficiaries are staying in home health longer. Between 2002 and 2008, the number of home health episodes per beneficiary rose from about 1.6 to 1.9.² The Commission is concerned about whether longer stays reflect patient needs or incentives that exist under the home health PPS to generate additional episodes.

Under home health PPS, payment incentives historically have influenced the amount of therapy provided The home health PPS uses the number of visits provided, not patient characteristics, to set payment for therapy episodes. Under the PPS implemented in 2000, Medicare paid almost twice as much for episodes with 10 or more therapy visits as for episodes with fewer than 10 therapy visits. In 2002–2007, the share of episodes that qualified for therapy payments increased steadily from 22 percent

to 27 percent, with virtually all the growth in therapy episodes concentrated in the range of 10 to 13 therapy visits. For example, between 2002 and 2007, the shares of episodes with 6 to 9 therapy visits and 14 or more therapy visits were mostly unchanged at about 9 percent and 12 percent, respectively (Figure 3B-2). By comparison, the share of episodes with 10 to 13 therapy visits during this time increased from 11 percent to 15 percent. Growth in therapy episodes was a major factor in annual growth in home health volume, accounting for about 40 percent of new episodes in 2007. Clinical or patient characteristics do not explain the pattern of utilization growth. The trend seems to reflect the distortion associated with a single payment threshold.

Changes in therapy in 2008 coincided with payment revisions but more analysis needed to understand impact on quality of care In 2008, CMS implemented revisions for therapy payments that resulted in the swiftest one-year change in therapy utilization since PPS was implemented. In 2008, the share of therapy episodes with decreased payments under the new system—those in the range of 10 to 13 therapy visits—dropped by about one-third, nearing the 2002 level. Conversely, volume increased for therapy episodes that have higher payment under the revisions. For example, in 2008, payment for episodes with six to nine visits increased by 30 percent, and the share of these episodes increased from 9 percent to 12 percent. At the higher end of the visit distribution, payment for episodes with 14 or more therapy visits increased by 26 percent, and the share of these episodes increased from 12 percent to 15 percent. The immediate change in utilization demonstrates that home health providers can quickly adjust services to payment changes in the therapy visit thresholds.

The magnitude of the therapy changes and their correlation with the payment threshold changes suggest that payment incentives continue to influence treatment patterns. This finding is not surprising, as the revised system pays on the basis of services provided, not patient characteristics. The utilization changes in 2008 suggest that the payment system revisions changed but did not eliminate the influence of payment incentives on therapy. More research is needed to determine whether these changes improved patient care.

Quality of care: Measures need further examination

In past reports, the Commission has reported on home health quality measures using the Outcome-Based Quality

**TABLE
3B-4****Episode outcomes improve on functional measures
though the rate of adverse events is unchanged**

	2004	2005	2006	2007	2008	2009
Functional measures (higher is better)						
Improvements in:						
Walking	36%	37%	39%	41%	44%	45%
Transferring	50	51	52	53	53	54
Bathing	59	61	62	63	64	64
Medication management	37	39	40	41	43	43
Patients have less pain	59	61	62	63	64	64
Adverse event measures (lower is better)						
Hospitalization	28	28	28	28	29	29
Emergency care	21	21	21	21	22	22

Source: MedPAC analysis of CMS Home Health Compare data.

Monitoring (OBQM) data set. These measures, collected through the Outcome and Assessment Information Set, examine patients' clinical severity and functional limitations at the beginning and end of an episode. In prior years, the Commission reported that scores for the five functional measures improved, while the adverse event measures (hospitalization and emergent care use) were unchanged. The data for 2009, reported in Table 3B-4, follow a similar pattern. However, the Commission has concerns that these data may not appropriately depict the quality provided in the home health setting.

The nationally reported OBQMs are challenging to interpret because they focus mostly on activities of daily living and instrumental activities of daily living, and they do not directly capture the specific diagnoses or clinical conditions that were the primary reason for use of home health care. For example, the OBQM functional measures reflect the improvement in function for all patients, not just those who received therapy services. Given the volume of therapy provided under the home health benefit, it would be useful to measure the gains in function specifically for patients who use the home health benefit for a primary therapy need (e.g., for therapy involving the upper body or the lower body).

The OBQMs are reported for all episodes with valid data, without concern about the episode's appropriateness for home health given the patient's needs and conditions. Measures for more specific populations and conditions would provide a better assessment of home health quality

and more clinically homogeneous groups for comparison among providers or time periods.

Another concern is the apparent inconsistency between functional measures and adverse event rates. For several years, OBQMs have indicated improvement in the functional measures, which suggests patients are healthier at the end of their home health spell, and we might expect adverse events to decline as functional abilities improve. However, the flat trend for hospitalizations and emergency room services suggests that is not the case. These divergent trends raise questions about the validity of the measures.

Some research has indicated that the measures may not properly adjust for changes in the characteristics of the home health population. One study found that the OBQM risk adjustment may disadvantage agencies that take patients with longer stays and more chronic conditions (Murtaugh et al. 2008). Though our analysis compares among years and not agencies, it is possible that some of the problems found in the agency-level analysis could affect the national comparison. If that is the case, it could result in measures misstating the quality of care. For example, the concentrated growth in number of providers raises the possibility that, in some saturated markets, agencies may be taking patients with less severe conditions. If the OBQM risk adjustment overstates the risk for this population, the improvements in the quality measures could reflect better outcomes achieved through taking healthier patients and not the quality of care provided.

**TABLE
3B-5****Medicare margins for freestanding agencies, 2006–2008**

	2006	2007	2008	Percent of agencies	Percent of episodes
All	15.9%	16.5%	17.4%	100%	100%
Geography					
Majority urban	16.5	16.7	17.8	81.5	81.4
Majority rural	15.8	15.4	15.7	18.5	18.5
Type of control					
For profit	19.2	18.3	18.5	86	78
Nonprofit	13.9	12.0	14.3	14	21
Government*	N/A	N/A	N/A	N/A	N/A
Volume quintile					
First	13.5	8.4	7.9	20	3
Second	13.6	11.7	9.2	20	7
Third	13.7	13.0	13.1	20	11
Fourth	17.7	16.8	16.1	20	20
Fifth	18.6	17.5	19.5	20	59

Note: N/A (not available).

*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of home health Cost Report files from CMS.

Though the OBQMs for 2009 suggest that quality is adequate, the Commission believes revised measures are necessary given the issues listed above. The Commission plans to examine the strengths and weaknesses of the OBQM measures and explore alternative measures that may capture clinically relevant outcomes for patients who the evidence suggests are appropriate for home health care.

Providers' access to capital: Adequate access to capital for expansion

Few HHAs access capital through publicly traded shares or public debt like issuing bonds. HHAs are not as capital intensive as other providers because they do not require extensive physical infrastructure, and most are too small to attract interest from capital markets. Information on publicly traded home health companies can provide some insight into access to capital but has limitations. Publicly traded companies may have businesses in addition to Medicare home health, such as Medicaid and private-duty nursing, nurse staffing services, home infusion, and home oxygen services. Also, publicly traded companies are a small portion of the total number of agencies in the industry.

Analysis of the for-profit companies indicates that they have adequate access to capital. In recent years, the major chains have been buying existing agencies to expand their businesses, though this activity stalled in 2009. The slowdown in 2009 is attributable to uncertainty about the impact of regulatory changes regarding change of ownership requirements and concerns about the impact of proposed legislative changes on home health payment. According to financial analysts interviewed by the Commission, the major publicly traded for-profit firms are considered to have access to capital markets necessary to make additional acquisitions.

For smaller or nonpublic entities, the entry of new providers indicates that access to capital for privately held agencies is adequate. In 2009, there was a net increase of 476 HHAs; virtually all of these agencies are for profit.

Medicare payments and providers' costs: Trends in services delivered have raised payments and providers' costs are higher in 2008

Change in the mix of services—from lower paid episode types to higher paid ones—has contributed to an increase in average payment per episode. The increase in the

volume of therapy episodes, discussed earlier, has increased payments. In addition, there has been a decline in lower paying low utilization payment adjustment episodes, which have fallen from about 15 percent in 2002 to 10 percent in 2008. Overall, average payment per episode has risen by about 3 percent annually from 2002 to 2007. In 2008, the average episode payment increased by 3 percent, rising to \$2,786 per episode (factoring out claims in areas considered to be at high risk for program integrity concerns, growth in average payment was 2.4 percent in 2008).

An increase in reported case mix is a primary factor contributing to higher payments in 2008. The annual payment update to the base rate for 2008 was reduced from 2.9 percent to about 0.15 percent to account for past improvement in agencies' documentation and coding practice that increased case mix (and payments) without a corresponding increase in severity. However, the reported case mix under the revised system increased by 2.4 percent, greater than the annual average increase of 1 percent in prior years (excluding claims from areas affected by program integrity problems). The higher than usual increase in case mix helped to offset the -2.75 percent reduction CMS implemented.

Historically, HHA costs per episode have increased at a low rate, averaging 1.9 percent a year in 2001 through 2008. That rate is significantly lower than the rate of inflation indicated by the home health market basket, which has averaged 2.9 percent since the PPS was implemented. Costs in 2008 grew by 3.8 percent, higher than in previous years. It is not clear why costs increased so significantly in 2008, but there was a similar experience in 2005–2006 when cost inflation spiked in one year and was substantially lower the next.

Medicare margins continue to exceed costs in 2008

The 2008 HHA margins were 17.4 percent for freestanding agencies, up from the previous year (Table 3B-5). We focus on freestanding agencies because they are the majority of providers and because their costs do not reflect allocation of overhead costs from the hospital.

Since an individual HHA can serve a mix of urban and rural patients, we determine an agency's rural or urban designation based on where most of their episodes are located. Under this definition, in 2008, rural providers had slightly lower margins than urban providers, though both had margins greater than 15 percent. To gain a better

understanding of providers that serve the least populated rural areas, we examined margins for agencies that were majority rural and for which more than 30 percent of episodes were in counties with urban populations of fewer than 2,500 people. For these agencies, margins were 15.2 percent, roughly the same as the margins of all agencies that were classified as serving mostly rural areas in 2008 (Table 3B-5).

Historically, Medicare margins have varied widely among HHAs. In 2008, the agencies in the bottom quintile of the Medicare margin distribution had an aggregate average margin of -12 percent, while the agencies in the top margin quintile had an aggregate average margin of 36 percent, consistent with the variation reported in prior years. The high margins suggest that some providers may be able to exploit the ambiguous nature of the benefit to deliver services that meet Medicare standards but are less costly than other providers. The high level of access, in addition to the rapid entry of new providers, also likely reflects the significant margins that are possible under Medicare payments.

The concern from the Commission's perspective is whether this variation reflects differences in provider efficiency or inaccuracies in Medicare payments. If high-profit agencies serve different patients or provide different services than low-margin agencies, these differences could indicate that payments do not accurately reflect costs in some instances. Our analysis of margins by provider, beneficiary, and episode characteristics suggests that providers can deliver quality care and earn significant profits under current payment levels and that providers with the lowest costs and the highest case mix have the best financial performance.

Agencies with high and low Medicare margins differed significantly in episode costs, but more analysis is needed to understand differences in case mix and payment

We assessed high- and low-margin agencies on a variety of metrics for freestanding agencies in 2007 (Table 3B-6, p. 210). The greatest difference between high- and low-margin agencies was in cost per episode. High-margin agencies had lower costs and higher episode volume. The cost per episode of high-margin agencies was about 40 percent lower than that for low-margin agencies, driven primarily by a lower cost per visit. The lower costs were likely related to the larger average size of high-margin agencies, as higher volume may permit them to achieve economies of scale that result in lower costs and better

**TABLE
3B-6****Comparing the size and cost of high- and low-margin home health agencies, 2007**

Characteristic	Low-margin agencies	High-margin agencies	All	Percent difference (high compared to low)
Medicare margin	-9%	37%	16.9%	N/A
Cost per episode (wage index and case-mix adjusted)	\$2,256	\$1,349	\$1,736	-40.2%
Cost per visit (wage index adjusted)	\$136	\$89	\$113	-34.3
Average total annual visits per provider	22,437	28,039	26,430	25
Average visits per episode (excludes low-use episodes)	21.7	19.4	20.3	-10.5
Share of episodes in:				
Urban counties	83%	85%	85%	N/A
Rural counties	17	15	15	N/A

Note: Values shown are medians for the quintile. High-margin quintile agencies were in the top 20 percent of the distribution of Medicare margins. Low-margin quintile agencies were in the bottom 20 percent of the distribution of Medicare margins. Excludes government agencies.

Source: 2007 cost reports, 20 percent sample of claims from home health datalink file, OASIS data.

financial performance. High-margin agencies also had lower costs because they provided about 11 percent fewer visits per full episode. Low- and high-margin agencies served about the same share of urban and rural patients. There was no significant difference in the quality composite scores of high- and low-margin agencies.

Our findings on patient severity were mixed but did not suggest that low-margin agencies serve more severe patients (Table 3B-7). High-margin agencies appeared to serve more severe patients based on the CMS-hierarchical condition category risk score, but there was no difference in the number of chronic conditions or functional impairments for the patients of high- and low-margin providers. We also compared the home health case mix for high- and low-margin agencies and found that high-margin agencies had higher case mix than low-margin agencies. Specifically, high-margin agencies provided more episodes that included 10 or more therapy visits and more episodes to patients in the two highest groups of clinical severity.

The analysis of the case mix of high- and low-margin agencies suggested that Medicare overpays for high case-mix episodes, as high-margin agencies had a case mix that was 7 percent higher. To explore this finding further, we compared agency case mix with changes in cost per episode, controlling for several factors. Our results indicated that for every 1 percentage point change in case mix relative to the mean, mean cost per episode changed more slowly (between 0.6 and 0.8 percentage point).³ This

result suggests that high-case-mix episodes appeared to be overpaid and low-case-mix episodes may have been underpaid. Since high-margin agencies have higher case mixes, the findings of this analysis indicate that these agencies tended to provide episodes for which payments are likely to exceed costs.

Our findings suggest that costs and visit volume are important factors in providers' financial performance. Results were mixed for patient severity and suggest that further analysis of the home health case-mix index is necessary. It appears that the home health case-mix adjuster may not accurately measure severity. The correlation between higher case mix and higher margins suggests that the system overpays for high-case-mix episodes.

Projecting margins for 2011

In modeling 2011 payments and costs, we incorporate policy changes that went into effect between the year of our most recent data, 2007, and the year of margin projection as well as those changes scheduled to be in effect in 2010. The major changes are:

- market basket updates in 2009 and 2010, offset by reductions for coding improvement that occurred in 2000 through 2005;
- a planned 2011 payment reduction of -2.71 to account for coding improvement in 2000 through 2005;

**TABLE
3B-7****Comparison of patient severity for high- and low-margin agencies in 2007**

Characteristic	Low-margin agencies	High-margin agencies	All	Percent difference (high compared to low)
CMS-HCC score	2.02	2.22	2.17	10%
Average number of activities of daily living with at least some reported difficulty	5.0	5.1	5.0	2
Mean number of chronic conditions per episode	7.0	7.0	7.0	0
Case mix	1.23	1.32	1.27	7
Therapy episodes as a share of total episodes	25%	30%	27%	20
Percent of episodes from high clinical severity case-mix groups	56%	66%	61%	18

Note: CMS-HCC (CMS-hierarchical condition category). Values shown are medians for the quintile. High-margin quintile agencies were in the top 20 percent of the distribution of Medicare margins. Low-margin quintile agencies were in the bottom 20 percent of the distribution of Medicare margins. CMS-HCC scores are for non-end-stage renal disease beneficiaries who qualified for full episode payment. Excludes government agencies.

Source: MedPAC analysis of 20 percent sample from home health datalink claims, Chronic Condition Warehouse, and CMS-HCC Model Output File.

- a case-mix increase of 2 percent a year (due to an increase in patient severity, coding improvement, and utilization changes); and
- an assumed average cost increase of 2.5 percent (high by historical standards).

On the basis of these factors, we project margins of 13.7 percent in 2011.

Medicare home health payments continue to be overly generous relative to HHAs' costs

The favorable financial performance in 2008 and projected performance for 2011 for Medicare home health are consistent with our findings from previous years. Since the advent of prospective payment, Medicare payments for home health services have consistently been more than adequate to cover costs, with an average margin of 17.4 percent from 2001 to 2008. Margins have remained high despite legislative changes to the market basket that reduced the annual increase in payment by an average of 1 percent from 2001 to 2005, a rate freeze in 2006, and administrative reductions for 2008 through 2011. These overpayments contribute to the insolvency of the Hospital Insurance Trust Fund and premium increases beneficiaries must pay for Medicare Part B, which finances a portion of home health care.

These overpayments may be attributable to the method followed to set home health payments initially. The BBA

required that the PPS base rate for a home health episode be budget neutral so that aggregate spending would equal the spending that would have occurred if IPS had remained in effect. However, between 1998 and 2008, the average number of home health visits dropped from 31.6 to 21.6 visits (Table 3B-8).

Even though some reductions were made to the initial base rate, these adjustments did not anticipate the magnitude by

**TABLE
3B-8****Beneficiaries receive fewer visits under PPS**

	1998	2008	Percent change
Physical therapy	3.1	4.6	51%
Occupational therapy	0.5	0.9	74
Speech-language pathology	0.2	0.2	-14
Skilled nursing	14.1	11.8	-16
Medical social work	0.3	0.1	-57
Home health aide	13.4	4.0	-70
Total	31.6	21.6	-32

Note: Data presented have been rounded to the nearest tenth. Percent change calculated based on the nearest thousandth.

Source: CMS 2000; MedPAC analysis of home health standard analytical file, excluding low utilization payment adjustment episodes.

which HHA costs would fall. HHAs had profits of more than 23 percent in 2001, the first year the base rate was in effect (Figure 3B-1, p. 203). Because providers delivered fewer visits than assumed, the payments under PPS have been consistently greater than providers' costs.

The change in the number of visits and the mix of services did not reduce the quality of care provided. The Commission found that the quality provided under PPS was equal to the care provided during the IPS period (Medicare Payment Advisory Commission 2004). The fact that quality was maintained despite a 32 percent decline in visits per episode demonstrates the malleable nature of the benefit, as agencies managed to deliver the same quality with significantly fewer visits.

The changes after implementation of the PPS illustrate the influence of payment incentives on the services provided. Under cost-based reimbursement, providers delivered more visits because of the incentive to maximize volume. Under the PPS, they delivered fewer visits overall because payments are for a lump sum of visits rather than per visit. The exception has been payments for therapy, which rewarded providers for increased numbers of visits. The 2008 therapy payment changes and their effect on utilization illustrate how Medicare payments can influence the services provided (Figure 3B-2, p. 206).

Reductions to payment updates have not been effective in lowering home health margins

Adjustments based on the market basket may be inadequate to address high payments for home health care. Even in 2006, when the home health payment update was eliminated, agency margins remained high. The Deficit Reduction Act of 2005 eliminated the home health update for 2006, effectively freezing home health rates at the 2005 level. Despite this reduction, providers still had average margins of 15.9 percent. Agencies were able to offset the impact of the elimination of the payment update by reducing costs and shifting to a higher paying mix of services.

How should Medicare payments change in 2011?

Our review of home health indicates that access is more than adequate in most areas and that Medicare payments are well in excess of costs. On the basis of these findings,

the Commission has concluded that home health payments need to be significantly reduced. In addition, efforts are needed to strengthen program integrity and quality measurement.

Update recommendation

RECOMMENDATION 3B-1

The Congress should eliminate the market basket update for 2011 and direct the Secretary to rebase rates for home health care services to reflect the average cost of providing care.

RATIONALE 3B-1

Most of our indicators suggest that home health payments are more than adequate. For 2011, the Commission is recommending that home health care rates be set to reflect the projected cost of the average home health episode. Under this recommendation, the Secretary would estimate the costs of care for 2011 by reviewing costs from a recent year. The costs would also be adjusted for any projected changes in service provision or costs between the year reviewed and 2011. Basing payments on providers' actual costs would effectively reset payment rates to lower levels.

IMPLICATIONS 3B-1

Spending

- Reduce Medicare spending by \$750 million to \$2 billion in 2011; more than \$10 billion over five years.

Beneficiary and provider

- Some reduction in provider supply is likely, particularly in areas that have experienced rapid growth in the number of providers. Access to care is likely to remain adequate, even if the supply of agencies declines.

RECOMMENDATION 3B-2A

The Congress should direct the Secretary to expeditiously modify the home health payment system to protect beneficiaries from stinting or lower quality of care in response to rebasing. The approaches should include risk corridors and blended payments that mix prospective payment with elements of cost-based reimbursement.

RATIONALE 3B-2A

This recommendation charges the Secretary with developing additional changes to home health payments to safeguard beneficiary care. Financial safeguards, such as profit and loss corridors or blended prospective and

cost-based payments, should be proposed as expeditiously as possible when the rebasing is implemented in 2011. These financial safeguards would help mitigate incentives to reduce services when payments drop because of the rebasing by redistributing payments from high-margin providers to low-margin agencies.

In both approaches the safeguards would be based on how providers changed the delivery of care after the rebasing, with the goal of redistributing payments to providers that maintained relatively higher levels of service. Agencies that held their visits per episode steady relative to a pre-rebasing benchmark would have relatively favorable treatment under the safeguards, and those that reduced their visits would receive more restrictive treatment. For example, under the profit and loss corridors, the adjustment for agencies that did not reduce their visits per episode could be more generous.

Approaches that mix PPS and corridors or cost-based payment involve trade-offs because, while softening the impact of rebasing, they could weaken incentives for provider efficiency. Unlike the current PPS, agencies that were able to lower their costs would see their payments fall, with efficiency gains resulting in lower provider revenue. However, the safeguards would not completely undermine the incentive for efficiency, as the risk corridors could be set narrowly enough so that they would recover or compensate for only a small fraction of excessive profits or extreme losses above the corridor thresholds. This result would maintain some of the rewards and penalties for efficiency. Avoiding a system that relies too heavily on cost to set payments would be prudent, as the cost-based system in effect in the early and mid-1990s proved vulnerable to abuse.

IMPLICATIONS 3B-2A

Spending

- Some administrative costs. The approaches could be implemented in a budget-neutral manner and should not have an overall impact on spending.

Beneficiary and provider

- This recommendation would provide incentives for agencies to preserve services during the rebasing. No impact on beneficiary access to care or providers' willingness to care for Medicare beneficiaries is expected.

RECOMMENDATION 3B-2B

The Secretary should identify categories of patients who are likely to receive the greatest clinical benefit from home health care and develop outcomes measures that evaluate the quality of care for each category of patient.

RATIONALE 3B-2B

The current home health quality measures focus mostly on improvements in activities of daily living or instrumental activities of daily living. The current measures reflect some important outcomes for home health care, but questions remain about the adequacy of the risk adjustment and the measures' direct relevance to the quality of skilled care provided in home health. The Commission believes more direct measures of the skilled care that is the primary purpose of the home health benefit would be appropriate. For these reasons, the Commission is recommending that the Secretary develop additional measures.

The additional measures should target the processes and outcomes related to specific diagnoses or conditions of patients likely to benefit the most from home health care. In developing these measures, the Secretary should review research and current data on home health outcomes, including the data from the Unified Post-Acute Care Instrument demonstration and other research into the efficacy of home health, to identify the patients who are appropriate for home health services. The categories of services and conditions examined should include rehabilitation, clinical indications for chronic conditions, and patients at high risk of hospitalization. For these subgroups of patients, the Secretary should develop measures that capture specific measures of performance, such as improvement in function related to primary rehabilitation diagnosis, changes in clinical indicators related to chronic conditions, and adverse outcomes such as hospitalizations or use of emergent care. By focusing on certain clinical factors related to the conditions associated with the need for home health care, the measures would provide more tangible measures of agency performance on homogeneous patient populations, facilitating more accurate comparison.

Further, identifying patients who are most appropriate for home health care could be a step toward better defining the benefit. Such information could be applied to a number of possible revisions to the home health benefit. Clinically appropriate measures with accurate risk adjustment are

critical to implementation of pay for performance. An understanding of the patients that benefit most from home health care could aid in development of revised “site-neutral” payment policies for post-acute care. In addition, the guidelines could inform efforts to develop bundled payment for acute and post-acute care. Finally, as mentioned earlier, Medicare could use this information to clarify guidance for providers.

IMPLICATIONS 3B-2B

Spending

- Savings of less than \$50 million in the first year and less than \$1 billion over 5 years. Some administrative costs.

Beneficiary and provider impacts

- No impact on beneficiary access to care or providers’ willingness to care for Medicare beneficiaries is expected. Potential for improvement in beneficiary care.

RECOMMENDATION 3B-3

The Congress should direct the Secretary to review home health agencies that exhibit unusual patterns of claims for payment. The Congress should provide the authority to the Secretary to implement safeguards, such as a moratorium on new providers, prior authorization, or suspension of prompt payment requirements, in areas that appear to be high risk.

RATIONALE 3B-3

The Commission and others have observed aberrant patterns of behavior that suggest some agencies may be abusing the program. CMS, the Government Accountability Office, and OIG have examined outlier payments and found a pattern that indicates rampant fraud in South Florida. The home health industry has expressed concern about program integrity in home health and stated the need for expanded oversight (National Association for Home Care and Hospice 2009, Visiting Nurse Associations of America 2009). CMS and other enforcement agencies should continue to actively review HHA patterns of utilization and target agencies with patterns that are anomalous. These reviews should focus on the elements that appear to be most susceptible to manipulation by agencies. Possible areas of emphasis include:

- **Therapy.** As discussed earlier, the Commission concluded that therapy episodes appear to be overpaid relative to others and that the amount of therapy

changed significantly in response to the 2008 revisions to the payment system. Payment review could be targeted at agencies that have unusually high rates of therapy episodes and agencies with the largest increase in the therapy episodes that are favored under the new system (those in the range of 6–9 and 14+ visits).

- **Multiple episode spells of home health.** Medicare permits beneficiaries to receive an unlimited number of home health episodes as long as a beneficiary meets the eligibility standards. This policy creates an area of potential abuse, as agencies can improve revenues by maximizing the number of episodes they provide. Fraudulent or abusive providers can pursue a number of approaches, such as stretching services over many episodes or continuing services for patients who are no longer eligible. Longer spells of home health care may be more frequent now because revisions implemented in 2008 increased payment for later episodes (third and subsequent episodes in a spell of home health). Similar to the examination of therapy payments, the Secretary and others should target agencies with high rates of later episodes and those that significantly increased the provision of these episodes after payments for later episodes increased.
- **Agencies with significantly fewer average visits per episode.** Under the PPS, agencies with fewer visits per episode will have lower costs and better financial performance. The Secretary could review the eligibility, care, coding, and financial results of agencies that provide significantly fewer visits per episode than average. The Secretary could examine medical records to ensure that patients are not being underserved or prematurely discharged. The Secretary could also review the survey history and rate of adverse events (such as hospitalizations or emergency room use) to gauge agency operations.
- **Physician accountability.** In cases of aberrant patterns of care, the Secretary could assess whether the efforts exercised by physicians in certifying care were adequate. The scope of review should scrutinize whether the physician made adequate efforts to certify that the patient was eligible for home health care and that the physician made adequate efforts to ensure that the services on the plan of care were necessary. One area to begin review includes physicians who certified services provided by the agencies involved in aberrant claims for outlier services in Miami–Dade County.

The Commission is also recommending that the Congress give the Secretary authority to respond swiftly when fraud is concentrated in certain regions. The Secretary should have the authority to temporarily suspend the enrollment of new home health providers in areas where the local trends suggest fraudulent or abusive patterns of care. Temporarily suspending enrollment in areas where providers are exploiting the program would help to keep questionable providers out of the program, reduce fraudulent payments, and decrease the investigative burden of high-fraud areas on the Secretary and other enforcement agencies.

IMPLICATIONS 3B-3

Spending

- Savings of less than \$50 million in the first year and less than \$1 billion over five years. Some administrative costs.

Beneficiary and provider impacts

- No impact on beneficiary access to care or providers' willingness to care for Medicare beneficiaries is expected.

Future refinements to the home health benefit

The Commission believes the home health payment system needs to be improved. There is significant variation in the services received by beneficiaries and costs of providers, and the current payment system appears vulnerable to abusive and fraudulent practices. Separate from the payment recommendations made in this chapter, additional changes that have the potential to improve the incentives of the current system should be examined. On the basis of our payment adequacy review, we plan to pursue several issues for further analysis:

- ***Understanding the factors driving growth in the length of home health spells.*** Proper oversight of multi-episode spells is important because Medicare pays for home health care on a per episode basis. The average number of episodes per beneficiary has risen 30 percent between 2002 and 2008. The Commission found that Medicare could strengthen oversight for patients with long hospice stays, and the Commission plans to explore the factors underlying growing home health lengths of spells to determine factors

responsible and whether current program requirements need to be strengthened. This concern is particularly acute for post-2007 spells, because the 2008 refinements raise payments for the third or subsequent episodes in a home health spell.

- ***Changes in delivery of therapy.*** The new therapy thresholds in effect in 2008 changed the distribution of therapy services. Identifying the factors that determined whether a patient received more or fewer visits in 2008, and determining whether these changes had a significant impact on outcomes, is crucial to understanding the impact of the new thresholds. This analysis will allow us to assess whether the revised system provides better incentives for aligning therapy provision with patient needs.
- ***Refinements to the case-mix index.*** Our analysis of the 2007 case-mix index indicates that it favored higher case-mix episodes and undervalued lower case-mix episodes. Given the significant revisions to the case mix in 2008, we plan to revisit this analysis to determine whether this bias continues under the new system. We will examine whether there are patient characteristics or services that are misvalued under the new case-mix system.
- ***Review of quality measures.*** The Commission will assess the adequacy of the current OBQMs and the accuracy of the risk adjustment used in the measures. We will also examine additional measures that focus on specific categories of patients. The Commission is interested in identifying patients who the evidence suggests are appropriately served in home health based on their diagnoses or service needs and developing measures that more directly capture the quality of care provided.

However, while payment policy is crucial, addressing the current challenges for the benefit may involve changing other policies. For example, Medicare currently has no cost-sharing requirements for home health care. The current PPS could be modified to set a portion of the payment on a per visit basis and include a beneficiary copay. For providers, a per visit approach encourages them to tailor the number of visits provided to a beneficiary's specific needs. The per visit copay would require that beneficiaries weigh the value of an additional visit with the cost of the copay.

Strengthening physician accountability

The recent trends in fraud and abuse suggest a need to strengthen oversight of the home health benefit. The Medicare Act assigns responsibility for certifying patient eligibility for home health care to physicians, but recurrent fraud and abuse problems in the benefit raise questions about physician accountability. A 2001 study by OIG found a gap in physicians' comprehension of Medicare requirements (Office of Inspector General 2001). For example, about 38 percent of physicians reported that they were unclear about Medicare's homebound definition, and 50 percent reported that they did not understand the skilled need requirement for home care. In a recent rulemaking, CMS reviewed options for strengthening physician accountability but did not take any action (Centers for Medicare & Medicaid Services 2008). The Commission plans to assess several alternatives or modifications to current policy that would strengthen physician accountability and effectiveness in certifying for home health care:

- **Requiring a face-to-face examination.** Physicians may certify a patient for home health care without an examination. Considering the complexity of Medicare's requirements for home health eligibility, it seems likely that physicians may benefit from the information gained by an in-person examination. Establishing clear expectations for the purposes of these examinations would be critical to ensuring their effectiveness.
- **Strengthening attestation procedures.** CMS previously required that physicians complete a form, the CMS-485, to attest to a beneficiary's eligibility and need for home health care. The form stated key program requirements and notified physicians of the penalties for signing a false attestation. The form

was retired in 2002, though the requirements for certification continued. While a number of guidelines remain that detail the documentation HHAs must collect from physicians, the use of a defined form ensured that the certification always followed a format that informed physicians of their responsibility. The lack of a specific format creates a vulnerability that unscrupulous providers may manipulate.

- **Role of a patient's physician during a home health episode.** Current law requires that a beneficiary be under the care of a physician while receiving home health care. This requirement plays several possible roles, such as ensuring oversight of home health services, encouraging beneficiary access to the usual source of care, and supporting continuity of care for the beneficiary after the episode is completed. However, Medicare has no specific expectations for the physician during the episode. Examining the role of outpatient care during an episode may provide insights for policy changes to strengthen the role of physicians for home health beneficiaries.

The above approaches seek to strengthen home health oversight through current program requirements for physician certification. However, the current magnitude of home health program integrity problems could suggest that measures beyond physician certification be considered. An alternative approach would be for Medicare to require a third party, such as a Medicare contractor or other entity, to evaluate a patient's need for home health care. The third-party entity would be responsible for assessing patient eligibility and need for home health care, facilitating greater consistency and stricter oversight in the application of Medicare requirements. ■

Endnotes

- 1 Excluding claims from areas with program integrity issues did not significantly change the episode and user growth rates.
- 2 Excluding claims from areas with program integrity issues did not significantly change the episode per beneficiary levels or growth.
- 3 The model estimated the change in cost per episode, controlling for agency case mix, wage index, and outlier episodes. The r-square for the model was 0.38.

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3C

SECTION

Inpatient rehabilitation facility services

R E C O M M E N D A T I O N

- 3C** The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2011.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

Inpatient rehabilitation facility services

Section summary

More than 330,000 Medicare fee-for service (FFS) beneficiaries received care in inpatient rehabilitation facilities (IRFs) in 2008. Between 2007 and 2008, Medicare FFS expenditures for IRF services declined from \$5.95 billion to \$5.84 billion, largely due to declines in FFS enrollment and a small decline in IRF utilization.

Assessment of payment adequacy

Our indicators of Medicare payment adequacy for IRFs, discussed below, are generally positive. The Commission therefore recommends holding payments at 2010 levels after concluding that IRFs will be able to accommodate cost changes in fiscal year 2011 at current payment levels.

Beneficiaries' access to care—Our measures of beneficiary access to care suggest that beneficiaries have sufficient access to IRF services.

- **Provider supply and capacity**—After declining slightly in 2006 and 2007, the aggregate supply of IRFs was unchanged in 2008. The IRF occupancy rate decreased continuously from 68 percent in 2004 to 61 percent in 2007, before increasing slightly to 62 percent in 2008. The stability in provider supply and low occupancy rates suggest that capacity remains adequate to meet demand.

In this section

- Are Medicare payments adequate in 2010?
- How should Medicare payments change in 2011?

- ***Volume of services***—The volume of Medicare FFS beneficiaries treated in IRFs, which decreased substantially in recent years due to factors unrelated to the adequacy of Medicare payments, stabilized in 2008. Our assessment of hospital discharge patterns to post-acute care suggests that beneficiaries who were not admitted to IRFs as a result of the 2004 reinstatement of the compliance threshold were able to obtain rehabilitation care in other settings, such as skilled nursing facilities and home health agencies.

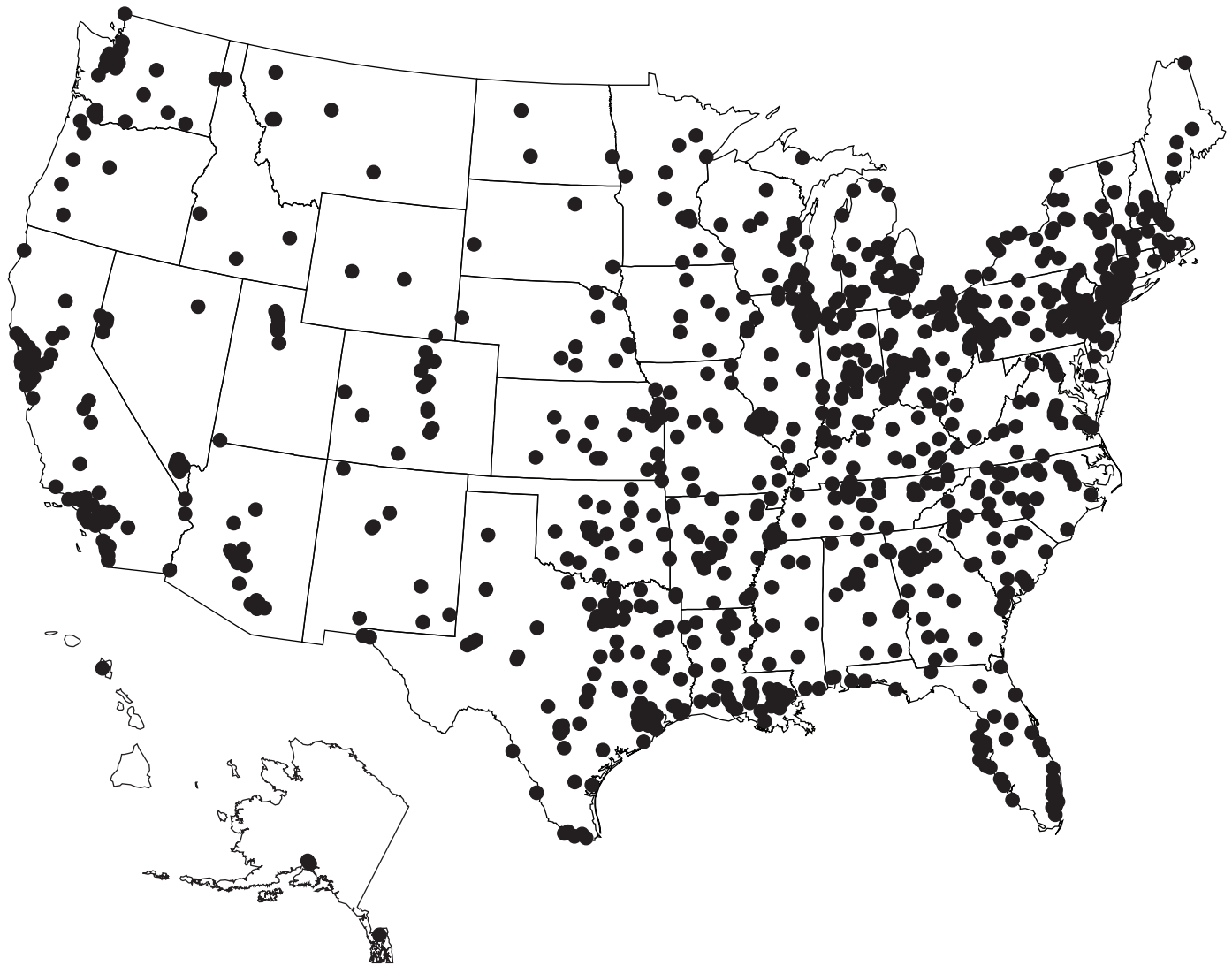
Quality of care—From 2004 to 2009, IRF patients' functional improvement between admission and discharge has increased, suggesting improvements in quality. However, changes over time in patient mix make it difficult to draw definitive conclusions about quality trends.

Providers' access to capital—Credit markets have begun to ease relative to the credit crisis of 2008 and are operating in a more normal manner. Hospital-based units, through their parent institutions, exhibit continued access to capital. Two major chains of freestanding facilities appear to have adequate access to capital. We are not able to determine the ability of independent freestanding facilities to raise capital.

Medicare payments and providers' costs—Growth in cost per case has slowed since 2007, but costs grew faster than payments due, in part, to a mid-year payment reduction in 2008. Nevertheless, the IRF aggregate Medicare margin for 2008 was 9.5 percent. We project that this figure will fall to 5.0 percent in 2010 due to elimination of the IRF update in the last half of 2008 that continued throughout 2009. To the extent that IRFs restrain their cost growth in response to fiscal pressure from the above-mentioned elimination of the IRF update, the decline in patient volume in prior years, or the recession, the projected 2010 margin could be higher than we have estimated. On the basis of our analyses, we conclude that IRFs could absorb cost increases and continue to provide care to clinically appropriate Medicare cases with no update to payments in 2011. We will closely monitor payment update indicators to reassess our update recommendation for the next fiscal year. ■

**FIGURE
3C-1**

Geographic distribution of IRFs, 2008



Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of the Provider of Services file from CMS.

Background

After an illness, injury, or surgery, some patients receive intensive inpatient rehabilitation services in an inpatient rehabilitation facility (IRF). IRFs may be specialized units within an acute care hospital, which constitute four of five IRFs, or specialized freestanding hospitals, which tend to be larger and make up the remainder of facilities.

In 2008, there were just over 1,200 IRFs in the United States, located in every state and the District of Columbia (Figure 3C-1). In 2008, the five states with the largest number of IRFs were Texas, Pennsylvania, California, New York, and Ohio—all states among the largest in general and Medicare population. The seven locations with the fewest IRFs were Hawaii, Maryland, Vermont, Delaware, Alaska, Wyoming, and the District of Columbia. IRFs are not the sole provider of rehabilitation services in communities; skilled nursing facilities (SNFs), home

**TABLE
3C-1****Medicare FFS spending, volume, and utilization for IRFs**

	TEFRA		PPS					Average annual change		
	2001	2002	2004	2005	2006	2007	2008	2002–2004	2004–2007	2007–2008
Medicare spending (in billions)	\$4.51	\$5.65	\$6.43	\$6.45	\$6.29	\$5.95	\$5.84	6.7%	–2.6%	–1.8%
IRF FFS patients	N/A	398,000	451,000	410,000	369,000	338,000	332,000	6.5	–9.2	–1.7
IRF FFS patients per 10,000 FFS beneficiaries	N/A	115.2	124.9	112.5	103.0	96.2	95.6	4.1	–8.3	–0.6
Payment per case	\$9,982	\$11,152	\$13,275	\$14,248	\$15,354	\$16,143	\$16,649	9.1	6.7	3.1
ALOS (in days)	14.0	13.3	12.7	13.1	13.0	13.2	13.3	–2.3	1.3	0.8

Note: FFS (fee-for-service), IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system), N/A (not available), ALOS (average length of stay). With respect to the number of IRF FFS patients in a particular year, each IRF FFS patient is counted only once during that year, regardless of whether the patient had multiple IRF admissions in that year.

Source: MedPAC analysis of MedPAR data from CMS, and data on aggregate Medicare spending for IRF services from the CMS Office of the Actuary.

health agencies, comprehensive outpatient rehabilitation facilities, and independent therapy providers also furnish rehabilitation services. Given the number and distribution of these providers of rehabilitation therapy services, it is unlikely that areas exist where IRFs are the only therapy provider available to Medicare beneficiaries.

About 332,000 Medicare fee-for-service (FFS) beneficiaries—nearly 1 percent of total FFS beneficiaries—received care in IRFs in 2008 (Table 3C-1). Relatively few Medicare beneficiaries use these services because they generally must be able to tolerate and benefit from three hours of therapy per day to be eligible for intensive rehabilitation treatment. Nevertheless, traditional Medicare is the principal payer for IRF services, accounting for about 60 percent of total discharges nationwide in 2008 (not including Medicare Advantage discharges).

Before January 2002, IRFs were paid under the Tax Equity and Fiscal Responsibility Act of 1982, on the basis of their average costs per discharge, up to an annually adjusted facility-specific limit. Pursuant to the Balanced Budget Act of 1997, IRFs began to be paid in 2002 under a prospective payment system (PPS) based on per discharge rates that vary according to rehabilitation needs, area

wages, and certain facility characteristics. As of 2004, all IRFs are paid under the IRF PPS.

Aggregate expenditures on IRF services in the Medicare FFS program grew after implementation of the PPS in 2002. In 2002, these expenditures totaled nearly \$5.7 billion, and this figure grew at an annual rate of 6.7 percent to about \$6.4 billion in 2004 (Table 3C-1). Between 2005 and 2008, however, aggregate FFS expenditures for IRFs fell, as more beneficiaries enrolled in Medicare Advantage plans and more facilities met the compliance threshold that CMS had reinstated in 2004 (see text box on compliance threshold, pp. 226–227). In 2008, aggregate FFS expenditures for IRF services totaled just over \$5.8 billion.

To qualify as an IRF for Medicare payment, facilities must first meet the Medicare conditions of participation for acute care hospitals. They must also:

- have a preadmission screening process to determine that each prospective patient is likely to benefit significantly from an intensive inpatient rehabilitation program;
- ensure that the patient receives close medical supervision and furnish, through qualified

personnel, rehabilitation nursing, physical therapy and occupational therapy, and, as needed, speech–language pathology, social services, psychological (including neuropsychological) services, and orthotic and prosthetic services;

- have a medical director of rehabilitation, with training or experience in rehabilitating patients, who provides services in the facility on a full-time basis for freestanding facilities or at least 20 hours per week for hospital-based rehabilitation units;
- use a coordinated interdisciplinary team approach led by a rehabilitation physician that includes a rehabilitation nurse, a social worker or case manager, and a licensed therapist from each therapy discipline involved in treating the patient; and
- have no fewer than 60 percent of all patients admitted with at least 1 of 13 conditions, specified by CMS, as a primary diagnosis or comorbidity.¹

Separate from these criteria that a facility must meet to be classified as an IRF, Medicare has coverage criteria that govern whether IRF services are covered for an individual Medicare beneficiary based on the patient’s medical and rehabilitation needs. CMS recently updated and revised these coverage rules for the 2010 fiscal year² (see text box on the revised coverage requirements, pp. 234–235).

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs that efficient providers incur and how much payments should change in the coming year (2011), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries’ access to care by examining the supply and capacity of IRF providers and changes over time in the volume of services provided, quality of care, provider access to capital, and the relationship between Medicare’s payments and providers’ costs. Overall, the Medicare payment adequacy indicators for IRFs are generally positive.

Beneficiaries’ access to care: IRF supply stable and volume changes minimal

We have no direct indicator of beneficiaries’ access to care because there are no surveys specific to this population.

However, our analyses of facility supply, occupancy rates, and volume of services provided suggest that beneficiaries’ access to IRF care is sufficient.

Capacity and supply of providers: Stable supply of IRFs and relatively low occupancy rates in 2008

From 2002, the outset of the PPS, through 2008, the year for which we have the most recent data, the supply of IRFs has increased overall. From 2002 to 2005, the national supply of IRFs increased by 1.5 percent per year until it reached its peak of 1,235 facilities in 2005 (Table 3C-2, p. 228). After decreasing slightly by an annual rate of 1.3 percent between 2005 and 2007, the total number of IRFs was unchanged in 2008 at 1,202 facilities. Although the aggregate number of facilities did not change in 2008, the composition of providers shifted slightly to include more urban, freestanding, and for-profit facilities.

Trends over time in occupancy rates provide another view of IRFs’ capacity to serve patients. The data, in sum, indicate that IRF capacity is adequate to handle current demand and could accommodate future increases (Table 3C-3, p. 228). For both freestanding and hospital-based facilities, occupancy rates have fallen throughout the decade. The decline in occupancy rates accelerated in 2004, coinciding with renewed enforcement of the compliance threshold. In 2008, the overall rate increased from the previous year by 1 percentage point to 62.3 percent, remaining down from 68.7 percent in 2002. Given that total patient discharges did not change between 2007 and 2008, this slight increase in occupancy is indicative of declining bed counts, which would be expected as IRFs adjust to the decline in discharges that occurred in recent years due to renewed enforcement of the compliance threshold. In 2008, the occupancy rate of freestanding IRFs (66.2 percent) was higher than that of hospital-based units (60.0 percent). IRF occupancy rates also vary by state, with most states’ aggregate occupancy rate ranging from 50 percent to 70 percent.

Volume of services: Volume of FFS patients in IRFs stabilized in 2008

The volume of Medicare FFS beneficiaries treated in IRFs, which decreased substantially in recent years due to factors unrelated to the adequacy of Medicare payments, stabilized in 2008. We measure the volume of Medicare FFS patients in IRFs as the number of FFS IRF patients per 10,000 FFS beneficiaries. This measure of patient volume removes the impact of increased enrollment in Medicare Advantage and allows us to examine the

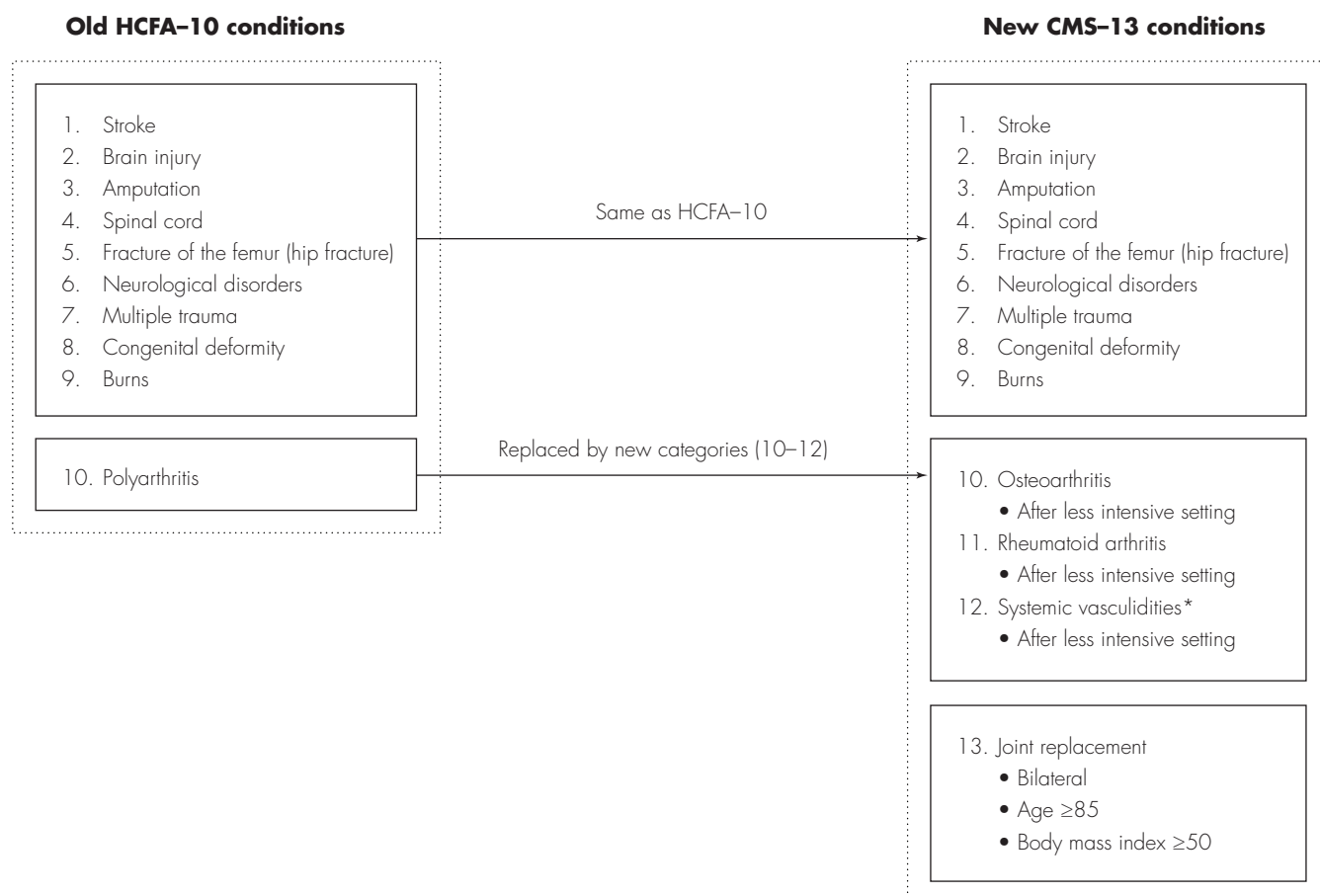
The compliance threshold for inpatient rehabilitation facilities

The “compliance threshold” refers to a requirement stipulating that inpatient rehabilitation facilities (IRFs) must serve a certain proportion of patients with certain diagnoses that CMS identified as typically requiring intensive inpatient rehabilitation. The intent of the compliance threshold is to distinguish IRFs from acute care hospitals in terms of primarily serving patients with conditions that CMS finds most indicative of the need for intensive inpatient rehabilitation. Currently, 60 percent of IRF cases at an individual facility must fall

into 1 of the 13 diagnoses that CMS specified in 2004. Initially, from 1984 to 2004, the compliance threshold required that 75 percent of an IRF’s cases fall in 1 of 10 diagnoses (Figure 3C-2). In 2002, CMS—at the time called the Health Care Financing Administration—discovered that its contracted fiscal intermediaries were using inconsistent methods to enforce the compliance threshold and that many IRFs did not comply with the rule.³ As a result, CMS suspended its enforcement of the rule until it could determine whether the regulation should be modified.

**FIGURE
3C-2**

Change in the inpatient rehabilitation facility compliance criteria



Note: HCFA-10 (Health Care Financing Administration-10).

*Systemic vasculidities are relatively rare inflammations of the arteries, frequently autoimmune, that involve a variety of systems, including joints.

(continued next page)

The compliance threshold for inpatient rehabilitation facilities (cont.)

In 2004, CMS redefined the arthritis conditions that counted toward the 75 percent rule to include only three specific types of arthritis. In addition, CMS clarified that only a subset of major joint replacement patients—the largest category of IRF patients in 2004—would count toward the 75 percent rule. These changes contributed to the reduction in the volume of patients admitted to IRFs that has occurred since 2004. The average case mix of IRF patients also increased during this period, as IRFs admitted fewer joint replacement patients and other types of patients who did not count toward the compliance threshold. These patients tended to be less complex, as measured by the IRF prospective payment system (PPS) relative payment weights, than other IRF patients. CMS created a four-year transition period for IRFs' compliance with the revised 75 percent rule. The Deficit Reduction Act of 2005 (DRA) added a year to the transition. As amended by the DRA, the policy was:

- 50 percent of the IRFs' total patient population must meet the revised regulations in cost reporting years beginning on or after July 1, 2004, through June 30, 2005;
- 60 percent, in cost reporting years beginning on or after July 1, 2005, through June 30, 2007;
- 65 percent, in cost reporting years beginning on or after July 1, 2007, through June 30, 2008; and
- 75 percent in cost reporting periods beginning on or after July 1, 2008.

However, the Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) rolled back the compliance threshold to 60 percent and capped it at that level permanently, starting with cost reporting

periods beginning on or after July 1, 2007. It also made permanent, via statute, CMS's discretionary policy of allowing IRFs to count patients toward the compliance threshold if they had comorbidities (rather than primary diagnoses) that were among 1 of the 13 qualifying conditions. In addition, the legislation set the update for IRF base payment rates at zero for the last half of fiscal year 2008 and for all of fiscal year 2009 and directed the Secretary of Health and Human Services to study access to IRF care under the compliance threshold. This study would include an examination of conditions that are commonly treated in IRFs but that do not count toward the compliance threshold, as well as an analysis of alternatives to or refinements of the compliance criteria, specifically with respect to patients' functional status, their diagnoses, and their comorbidities. The Secretary was required to submit a report on these analyses to the Congress no later than 18 months after the date of enactment of the MMSEA, but this report had not been published as of January 2010.

Renewed enforcement of the compliance threshold in 2004 was controversial. Even though a threshold had been in place since 1984, CMS did not consistently enforce it. The revised rule categorized large classes of admissions as not counting toward the compliance threshold. In particular, CMS concluded that most joint replacement patients did not need the intensive rehabilitation services that IRFs provided and could receive rehabilitation services from alternative providers, such as acute care hospitals, skilled nursing facilities, outpatient rehabilitation providers, and home health agencies. IRFs not in compliance with the revised rule would lose their IRF classification and would be paid acute inpatient PPS rates for all cases, which generally are much lower than IRF PPS rates.⁴ ■

prevalence of IRF use among Medicare FFS enrollees. In 2002, 115 of 10,000 FFS beneficiaries had an inpatient stay at an IRF; in 2004, this figure grew to 125 IRF patients but, by 2007, it declined to 96 IRF patients, a 23.0 percent decrease over three years (Table 3C-1, p. 224). The substantial decline in IRF FFS patients between 2004 and 2007 was largely the result of providers' adjustment to the CMS compliance threshold. Increased medical review of

IRF claims by CMS contractors may also have contributed to the decline in IRF admissions.⁵ The sharp decline in volume tapered off in 2008, slowing down from an annual decrease of 8.3 percent between 2004 and 2007 to a minimal decrease of 0.6 percent in 2008. This stabilization in IRF volume in 2008 coincides with actions taken by the Congress in late 2007 to permanently cap the compliance threshold at 60 percent.

**TABLE
3C-2****Supply of IRFs stabilizes in 2008**

Type of IRF	TEFRA		PPS					Average annual percent change		
	2001	2002	2004	2005	2006	2007	2008	2002-2005	2005-2007	2007-2008
All IRFs	1,144	1,181	1,221	1,235	1,225	1,202	1,202	1.5%	-1.3%	0.0%
Urban	984	1,002	1,024	1,025	1,016	998	1,000	0.8	-1.3	0.2
Rural	160	179	197	210	209	204	202	5.5	-1.4	-1.0
Freestanding	212	214	217	217	217	219	221	0.5	0.5	0.9
Hospital based	932	967	1,004	1,018	1,008	983	981	1.7	-1.7	-0.2
Nonprofit	724	751	768	768	758	740	738	0.7	-1.8	-0.3
For profit	270	274	292	305	299	288	291	3.6	-2.8	1.0
Government	150	156	161	162	168	174	173	1.3	3.6	-0.6

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). For all years, the rural/urban breakdown is by Core-Based Statistical Area definition.

Source: MedPAC analysis of the Provider of Services files from CMS.

Changes in patient mix have also occurred over time, due largely to the admission of a higher percentage of patients with diagnoses that meet the compliance threshold. The percentage of IRF cases that involve 1 of the 13 CMS-specified conditions has increased over time, according to analysis of proprietary data for a sample of IRFs (Table 3C-4).⁶ In the first three years of renewed enforcement of the compliance threshold (2004–2006), the aggregate percent of Medicare cases meeting the threshold increased rapidly from 44.9 percent to 59.8 percent. However, when the Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) capped the compliance threshold permanently

at 60 percent in 2007, the compliance rate increased a moderate 1.5 percentage points over the next three years, from 61.2 percent in 2007 to 62.7 percent in 2009.

The average case mix of IRF patients has also increased in severity, resulting in higher payments per case and increased average lengths of stay. Cases that did not meet the compliance criteria were less complex, as measured by the IRF PPS relative payment weights, than cases that met the criteria in each of the years between 2004 and 2009, based on our analysis of proprietary data from eRehabData.com for a sample of IRFs. In 2004, for example, the relative payment weight for compliant cases averaged

**TABLE
3C-3****Occupancy rate declines until 2007, edges up in 2008**

Occupancy rates							Percentage point change		
	2002	2004	2005	2006	2007	2008	2002-2004	2004-2007	2007-2008
Freestanding	74.3%	71.9%	67.7%	64.7%	64.6%	66.2%	-2.4%	-7.3%	1.6%
Hospital based	65.5	65.3	62.9	60.4	59.5	60.0	-0.2	-5.8	0.5
Total	68.7	67.5	64.6	61.9	61.3	62.3	-1.2	-6.2	1.0

Note: Occupancy rate calculated based on total patient days divided by bed days available during the facility's cost reporting period.

Source: MedPAC analysis of Medicare cost report data from CMS.

**TABLE
3C-4****Compliance rate of Medicare IRF cases increases, 2004–2009**

	2004	2005	2006	2007	2008	2009
Estimated compliance rate of Medicare IRF cases	44.9%	55.5%	59.8%	61.2%	61.4%	62.7%

Note: IRF (inpatient rehabilitation facility). The data for 2009 are limited to discharges that occurred between January and September 2009. The compliance rate is the percent of IRF cases that fall into 1 of 13 CMS specified diagnoses. As of July 2007, 60 percent of a facility's cases must fall into one of these diagnoses for the facility to be paid as an IRF.

Source: MedPAC analysis of data from eRehabData®.

about 1.3, compared with about 0.9 for noncompliant cases. In 2009, the relative payment weight for compliant cases was 1.4, compared with 1.1 for noncompliant cases. Consequently, as IRFs adjusted their admission patterns to meet the compliance threshold, the average case mix of the IRF patient population has increased over time. According to our analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument (IRF–PAI) data, IRFs experienced an overall 2.3 percent increase in Medicare case mix from the first half of 2008 to the first half of 2009. The continued growth in case mix for 2009 appears to reflect continued movement away from hip and knee replacements, which have lower weight, as well as some increase in the severity of other patients treated by IRFs. As the average case

mix of IRF patients increases, payment per case and the average length of stay (ALOS) are expected to increase as well. In the three periods (2002–2004, 2004–2007, and 2007–2008), payments per case increased at average annual rates of 9.1 percent, 6.7 percent, and 3.1 percent, respectively (Table 3C-1, p. 224). Although the ALOS in IRFs declined between 2002 and 2004, a trend consistent with implementation of the IRF PPS, the ALOS reversed trends and increased gradually from 2004 to 2008 as case mix increased.

This change in case mix is also apparent if we look at the shift in the diagnosis profile of Medicare FFS IRF patients since 2004 (Table 3C-5). Notably, among these cases, the relative share of major joint replacements of

**TABLE
3C-5****IRF patient mix has changed, 2004–2009**

Type of case	Percent of IRF Medicare FFS cases						Percentage point change, 2004–2009
	2004	2005	2006	2007	2008	2009*	
Stroke	16.6%	19.0%	20.4%	20.9%	20.4%	20.6%	4.0
Fracture of the lower extremity	13.1	15.0	16.1	16.4	16.0	15.5	2.4
Major joint replacement of the lower extremity	24.0	21.3	17.8	15.0	13.1	11.4	–12.6
Debility	6.1	5.8	6.2	7.7	9.1	9.2	3.1
Neurological disorders	5.2	6.2	7.0	7.8	8.0	9.0	3.8
Brain injury	3.9	5.2	6.0	6.7	7.0	7.3	3.4
Other orthopedic conditions	5.1	5.1	5.2	5.5	6.0	6.3	1.2
Cardiac conditions	5.3	4.2	4.0	4.2	4.6	4.9	–0.4
Spinal cord injury	4.2	4.5	4.6	4.6	4.3	4.3	0.1
Other	16.4	13.8	12.8	11.3	11.3	11.5	–4.9

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service). Other includes conditions such as amputations, major multiple trauma, and pain syndrome. Numbers may not sum to 100 percent due to rounding.

*Data taken from January through June of 2009.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

**TABLE
3C-6****Share of hospital discharges to IRFs declined for hip and knee replacements, but remained stable for stroke**

DRG	Discharge destination	Percent of DRG discharges					Percentage point change in DRG share	
		2004	2005	2006	2007	2008	2004-2007	2007-2008
Major joint replacement/hip and knee replacement	IRF	28%	24%	20%	16%	14%	-12%	-2%
	SNF/swing bed	33	34	35	36	36	3	0
	Home health	21	25	27	29	30	8	1
	All other settings	18	18	18	19	19	1	0
Stroke	IRF	18	18	19	19	19	1	0
	SNF/swing bed	27	26	26	26	25	-1	-1
	Home health	11	11	12	12	12	1	0
	All other settings	45	44	44	44	44	-1	0

Note: IRF (inpatient rehabilitation facility), DRG (diagnosis related group), SNF (skilled nursing facility). All other settings includes outpatient care, other inpatient facilities, or home. Numbers (percent of DRG discharges) may not sum to 100 percent due to rounding.

Source: MedPAC analysis of hospital inpatient Medicare claims data from CMS.

the lower extremity fell from 24.0 percent to 11.4 percent between 2004 and the first half of 2009. This decline is consistent with the more limited definition of compliant joint replacement cases adopted by CMS in 2004. During the same period, the relative share of stroke and fracture of the lower extremity cases increased from a combined 29.7 percent of cases to 36.1 percent.

In contrast, cases of debility, neurological disorders, and brain injury in IRFs have increased in both relative and absolute terms. Collectively, between 2004 and the first half of 2009, the relative share of these three conditions of all Medicare FFS cases increased from 15.2 percent to 25.5 percent. Between 2004 and 2008, the total number of Medicare FFS cases in IRFs for these three conditions also increased: 6.9 percent per year for brain injuries, 3.3 percent per year for neurological disorders, and 2.2 percent per year for debility (total case numbers not shown in Table 3C-5, p. 229). This absolute growth is particularly notable in light of the decrease in the FFS population since 2005. Growth in neurological disorder and brain injury cases may in part reflect facilities' greater focus on patients with conditions that meet the compliance threshold. The growth in debility cases is more surprising because it is not 1 of the 13 conditions included in the compliance threshold.

The decline in IRF FFS volume coinciding with renewed enforcement of the compliance threshold has raised

questions about the impact of the compliance threshold on beneficiaries' access to care. The decrease in IRF patient volume is difficult to interpret because we cannot identify beneficiaries who would have received care in an IRF if not for the compliance threshold. If patients who need intensive rehabilitation are able to obtain appropriate care in other settings, the reduction in IRF patient volume over the last few years—while significant—may not constitute an access problem. To draw inferences about the effects of the compliance threshold on beneficiary access to care, we analyzed changes in post-hospital discharge destinations for patients likely to need rehabilitation from 2004 to 2008. We found that among stroke cases—a condition that CMS has continued to identify as appropriate for admission to IRFs, without qualifications—the share of hospital patients discharged to IRFs and other settings has remained largely unchanged (Table 3C-6). In contrast, for hip and knee replacement cases, a condition for which CMS has limited the types of cases that count toward the compliance threshold, the relative share of hospital patients discharged to IRFs has halved between 2004 and 2008. However, the share of patients with hip and knee replacements discharged to SNFs and home health agencies has increased during this period, filling in for the drop in discharges going to IRFs and suggesting that these beneficiaries were able to obtain rehabilitation care in other settings.

It is difficult to assess whether the rehabilitation care received is comparable across different post-acute settings in terms of quality, outcomes, and costliness. A Commission-sponsored study conducted by RAND found that post-acute care for a hip or knee replacement patient treated in an IRF cost Medicare roughly \$4,400 more than care for a similar patient treated in a SNF in 2002 and 2003, but this finding must be interpreted cautiously (Beeuwkes Buntin et al. 2005). In measuring costs, this study did not consider costs associated with physician and outpatient services. In terms of outcomes, the study found that IRF patients were less likely than SNF patients to be institutionalized. The study made its best effort to control for observable and unobservable patient characteristics that influence the selection of a site of care, but the study acknowledged the difficulty of doing this fully and indicated that it could not rule out that some selection effects may remain. In addition, the study was unable to do a systematic analysis of functional gain, a more direct outcome measure for patients with hip and knee replacements than institutionalization, because of the lack of common patient assessment instruments across sites of service. As a result, given data and methodological limitations, it is difficult to draw definitive conclusions about the relative costs and outcomes for patients with hip and knee replacements in IRFs versus those in SNFs. In future work, we intend to continue to explore differences in costs and outcomes across post-acute care settings.

The Deficit Reduction Act of 2005 required CMS to implement a demonstration project under which the agency would develop and field a uniform post-acute care patient assessment instrument, with the goal of comparing patients and outcomes across settings to assess the potential to rationalize Medicare payments for post-acute care across settings. The common patient assessment instrument has been developed, and data collection began in early 2008. The corresponding final report is due in July 2011. Efforts like this demonstration to develop a common patient assessment instrument are important for potential future efforts to develop a site-neutral payment system for post-acute care. The Commission supports the concept of a payment system for post-acute care that is based on a patient's clinical needs rather than on the location of care.

Quality of care: Indicators show improvement, but case-mix changes hinder drawing inferences about quality trends

Our indicators of quality of care provided by IRFs show some improvement from 2004 to 2009, although changes

in IRF patient mix over time make it difficult to ascertain whether it represents a true change in quality. To assess quality, we use a measure commonly tracked by the industry: the difference between admission and discharge scores for the Functional Independence Measure™ (FIM™), which is incorporated in the IRF-PAI. The 18-item FIM measures the level of disability in physical and cognitive functioning and the burden of care for a patient's caregivers (Deutsch et al. 2005). The total FIM score can range from 18 to 126, with a higher number meaning more functional independence.⁷

To measure quality improvement, we use the average FIM score at discharge minus the average FIM score at admission (commonly referred to as FIM gain). A larger number indicates more gain in functional independence between admission and discharge. We report this measure in two ways: we compare differences for all FFS Medicare patients treated in an IRF and for a subset of Medicare patients who were discharged home from an IRF.

Between 2004 and 2009, FIM gain between IRF admission and discharge increased for all Medicare FFS patients and the subset of patients who were discharged home (Table 3C-7, p. 232). Between 2004 and 2009, FIM gain increased 2.4 points for all FFS patients, from 22.4 to 24.8; among FFS patients discharged home, FIM gain increased 3.4 points, from 25.3 to 28.7.

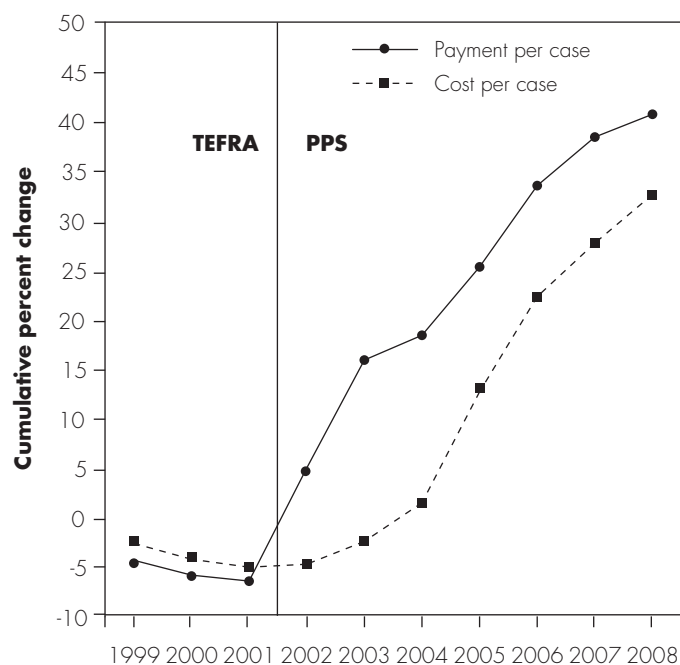
The increases in FIM gain, however, may not represent actual quality improvements over time, as these estimates do not take into account underlying changes in patient case mix. For these FIM gains to accurately measure IRF quality over time, the functional status of patients at admission must be similar throughout the comparison period. In recent years, however, patients have had lower functional scores at admission than those in earlier years, reinforcing our observation that IRF patient severity has increased over time. Patients with a lower functional score at admission, by definition, have more potential to improve their FIM score over the course of their IRF stay. Consequently, it is unclear whether the higher FIM gain we observe over time is due to an improvement in quality or because IRFs have admitted a more impaired group of patients with more potential for improvement. We are analyzing risk-adjusted functional gain and other potential quality measures, which we anticipate will help us better measure trends in IRF quality in the future.

**TABLE
3C-7****IRF patients' functional gain has increased**

	2004	2005	2006	2007	2008	2009
All IRF patients						
FIM™ at admission	68.0	66.1	63.6	62.2	61.2	60.0
FIM™ at discharge	90.4	89.3	87.1	86.1	85.5	84.8
FIM™ gain	22.4	23.2	23.5	23.9	24.2	24.8
IRF patients discharged home						
FIM™ at admission	71.9	70.2	68.0	66.6	65.7	64.6
FIM™ at discharge	97.1	96.6	94.9	94.2	93.8	93.3
FIM™ gain	25.3	26.4	26.9	27.6	28.1	28.7

Note: IRF (inpatient rehabilitation facility), FIM™ (Functional Independence Measure™). FIM™ scores measure a patient's level of physical and cognitive functioning and range from 18 to 126, with a higher score indicating more functional independence. FIM™ gain may not equal FIM™ at discharge minus FIM™ at admission due to rounding. Data are for January 1–June 30 of each year.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

**FIGURE
3C-3****Overall, IRFs' payments per case have risen faster than costs, 1999–2008**

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Data are from consistent two-year cohorts of IRFs. Costs are not adjusted for changes in case mix.

Source: MedPAC analysis of Medicare cost report data from CMS.

Providers' access to capital: Credit markets appear to be normalizing

In our March 2009 report, we noted that economy wide disruptions in the credit markets had caused the health care sector to experience difficulties accessing capital and that this measure was probably not a useful indicator of Medicare payment adequacy under the circumstances (Medicare Payment Advisory Commission 2009). However, credit markets appear to be recovering from the previous year and are operating in a more normal manner.

Four of five IRFs are hospital-based units that have access to capital through their parent institution. As described in greater detail in our chapter on hospital inpatient and outpatient services, hospitals' access to capital has normalized throughout 2009, as evidenced by lower hospital bond interest rates, a level of bond offerings similar to that of 2007, and a steady amount of hospital construction. As a result, it is likely that hospital-based IRF units also have adequate access to capital.

As for freestanding facilities, an analysis of two major national chains finds that they continue to experience positive revenue growth and are able to access the capital markets. One major national chain of freestanding IRF providers is highly leveraged, but the providers' Medicare IRF margins remained high throughout 2008. In its quarterly report for the third quarter of 2009, the chain reported strong revenue growth, continued work

**TABLE
3C-8****IRFs' Medicare margins, by type**

Type of IRF	TEFRA				PPS			
	2001	2002	2003	2004	2005	2006	2007	2008
All IRFs	1.5%	10.9%	17.8%	16.6%	13.2%	12.4%	11.9%	9.5%
Urban	1.5	11.4	18.3	16.9	13.4	12.5	12.1	9.7
Rural	1.1	5.8	12.4	13.7	11.8	10.6	10.0	7.4
Freestanding	1.5	18.5	22.9	24.7	20.4	17.4	18.5	18.0
Hospital based	1.5	6.2	14.8	12.1	9.3	9.6	8.1	4.2
Nonprofit	1.6	6.6	14.6	12.7	10.3	10.7	9.7	5.3
For profit	1.2	18.6	23.8	24.4	19.3	16.2	16.8	16.8
Government	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beds								
1–10	0.8	2.1	5.0	5.9	1.2	–0.3	–1.4	–5.0
11–21	1.1	3.5	12.2	10.1	6.7	7.1	5.7	0.6
22–59	1.6	10.2	17.6	15.9	13.0	12.0	11.2	8.6
60+	1.7	17.0	22.7	23.1	19.0	17.7	18.0	17.0

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system), N/A (not available). Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of Medicare cost report data from CMS.

on several new facilities, and plans to refurbish existing facilities and expand into different markets, suggesting that it has access to the necessary capital. A second chain, operating six freestanding IRFs, has reported increased revenue and high margins in the third quarter of 2009; moreover, it financed its merger with another hospital company at the end of 2009 with a mix of fixed-income and equity offerings. Outside these two chains, most other freestanding facilities are independent or local chains of only a few providers (for profit or nonprofit). The extent to which these providers have access to capital is less clear.

Medicare payments and providers' costs: Overall, IRFs' payments have grown faster than costs since implementation of the PPS

With introduction of the IRF PPS in 2002, payments per case rose rapidly while growth in cost per case remained low in both 2002 and 2003 (Figure 3C-3). Renewed enforcement of the compliance threshold resulted in rapid growth in cost per case between 2004 and 2006, rising 10 percent per year on average, as case mix increased and the volume of cases declined. The decline in volume led to increased cost growth as occupancy rates fell and fixed

costs were spread over a smaller volume of cases. Between 2006 and 2008, cost growth slowed to an average of 5.1 percent per year as patient volume steadied.⁸ Part of this cost growth was due to an increase in patient case mix. From 2004 onward, payment increases have not kept pace with cost growth, but, on net, payments have still grown faster than costs since implementation of the PPS.

IRF Medicare margins declined in 2008 but remain healthy

In aggregate terms, the financial performance of IRFs with respect to Medicare remained substantially positive through 2008. During the first two years of the IRF PPS, margins rose rapidly, reaching 17.8 percent in 2003 with all IRF provider types experiencing solid gains (Table 3C-8). After this rapid buildup, margins declined moderately each year but remained at a healthy 9.5 percent in 2008. The decline in margins over this period was mostly due to large drops in patient volume when fixed costs were being spread over fewer patients. The drop in margin from 2007 to 2008, however, was due largely to a mid-year drop in Medicare payment rates to 2007 levels.

Revised inpatient rehabilitation facility coverage requirements, effective January 2010

In its inpatient rehabilitation facility (IRF) prospective payment system 2010 final rule, CMS revised the coverage requirements for IRF services. The intent of this effort was twofold: (1) to update the existing coverage policy developed more than 25 years ago to better reflect current practices in inpatient rehabilitation services and (2) to promote greater transparency and consistency in the medical review of IRF claims (Centers for Medicare & Medicaid Services 2009). Under the coverage criteria that took effect on January 1, 2010, the following requirements must be met for a beneficiary's IRF admission to be considered reasonable and necessary:

- The patient requires therapy in at least two disciplines (physical therapy, occupational therapy, speech–language pathology, or prosthetics/orthotics), one of which must be physical or occupational therapy.
- The patient generally requires and can reasonably be expected to benefit from intensive rehabilitation therapy that most typically consists of three hours of therapy per day at least five days per week. Under this policy, an IRF admission for the purpose of assessing whether a patient is appropriate for IRF care is no longer covered. Moreover, therapy must begin within 36 hours from midnight of the day of admission.
- The patient is sufficiently medically stable at the time of the IRF admission to be able to actively participate in intensive therapy.
- The patient requires supervision by a rehabilitation physician. This requirement is satisfied by physician face-to-face visits with a patient at least three days a week.
- The patient requires an interdisciplinary approach to care.

(continued next page)

Like other Medicare sectors, margins vary substantially across providers. In 2008, IRF margins were –10.6 percent at the 25th percentile and 16.2 percent at the 75th percentile. Freestanding and for-profit IRFs—which had the highest margins in 2004 (greater than 20 percent)—continued to exhibit the best financial performance in 2008 with margins of 18.0 percent and 16.8 percent, respectively.⁹ In comparison, hospital-based IRFs and nonprofit IRFs had lower margins, at 4.2 percent and 5.3 percent, respectively. In 2008, urban IRFs also showed a slightly higher aggregate margin (9.7 percent) than rural IRFs (7.4 percent), despite a 21 percent payment add-on for rural facilities.

Medicare margins also vary by the size of the IRF, with larger IRFs having higher margins than smaller IRFs. The difference in financial performance between large and small IRFs can also be observed within freestanding and hospital-based facility categories.¹⁰ In addition to benefiting from economies of scale, large IRFs have higher occupancy rates than small IRFs, which likely contribute to their more favorable margins.

Medicare margins for 2010

To project the aggregate Medicare margin for 2010, we model the policy changes that went into effect in 2009 and 2010 as well as any policies scheduled to be in effect in 2011 other than the 2011 update. These policies include:

- holding the IRF base payment rate for fiscal year 2009 at the 2007 level, in accord with the MMSEA (this rate represents a 1.6 percent decrease in payments from the 2008 average level);¹¹
- decreasing outlier payments for fiscal year 2009 by 0.7 percentage point to maintain a 3 percent outlier target (Centers for Medicare & Medicaid Services 2008);¹² and
- increasing payment rates by the full 2.5 percent market basket update for fiscal year 2010.

In recent years, the policy that we anticipated to have the most significant impact on projected margins was the phase-in of the compliance threshold. However, with

Revised inpatient rehabilitation facility coverage requirements, effective January 2010 (cont.)

As part of the coverage criteria, CMS established the following process and documentation requirements IRFs must follow to demonstrate that a patient meets the above coverage criteria:

- Comprehensive preadmission screening—Before an IRF admission (generally within 48 hours immediately preceding admission), a qualified clinician designated by a rehabilitation physician must adequately document the patient's condition and care needs to allow the rehabilitation physician to make an informed decision to admit the patient.
- Post-admission evaluation—A post-admission evaluation by a rehabilitation physician must occur within 24 hours of admission to verify that the preadmission screening information is accurate, identify relevant changes in the patient's condition, and begin development of a care plan.
- Individualized overall plan of care—Within 4 days of admission, an individualized overall plan of care must be developed by a rehabilitation physician for each patient.
- Interdisciplinary team—The interdisciplinary team is required to meet once per week, in contrast to the prior requirement of once every two weeks. The team must include a rehabilitation physician, a registered nurse with specialized training or experience in rehabilitation, a social worker or case manager, and a licensed therapist from each therapy discipline involved in treating the patient.
- A rehabilitation physician is required to approve the results of the preadmission screening, conduct the post-admission evaluation, and lead the interdisciplinary team. ■

the threshold now permanently capped at 60 percent, we believe IRFs will no longer need to reduce admissions to remain compliant. Occupancy rates for IRFs started to improve in 2008, with total patient volume also holding steady, suggesting that the decline in patient volume experienced by IRFs since 2004 has tapered off. Therefore, taking account of the recent legislation and other IRF policy changes, we project that aggregate Medicare margins will decline from 9.5 percent in 2008 to about 5.0 percent in 2010. The projected decrease in the margin is largely the result of the MMSEA provision that eliminated the IRF payment update for the second half of 2008 and for the full year 2009. The margin projection for 2010 assumes that costs will increase at the market basket and does not assume increased cost control efforts by IRFs in response to fiscal pressure from the MMSEA's elimination of IRF updates, the decline in discharges in recent years, or the recession. To the extent that IRFs restrain their cost growth in response to these economic pressures, the projected 2010 margin could be higher than we have estimated.

How should Medicare payments change in 2011?

The statutory payment update for IRFs is the market basket for rehabilitation, psychiatric, and long-term care hospitals, which is currently forecast to be 2.4 percent for 2011.¹³ IRFs should be able to accommodate cost changes in fiscal year 2011 with payments held at 2010 levels.

RECOMMENDATION 3C

The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2011.

RATIONALE 3C

Our indicators of Medicare payment adequacy are relatively positive. Capacity remains adequate to meet demand. Although IRFs' efforts to meet the compliance threshold since 2004 had a significant impact on IRF

volume, this decline was consistent with the underlying reason for the compliance threshold—to direct the most clinically appropriate types of cases to this intensive, costly setting. With the compliance threshold permanently set at 60 percent, the decline in the volume of Medicare FFS patients in IRFs tapered off in 2008. Our projected 2010 aggregate Medicare margin is about 5.0 percent, down from an estimated 9.5 percent in 2008. To the extent that IRFs restrain their cost growth in response to fiscal pressure from the MMSEA's zero updates, the decline in patient volume in prior years, or the economic downturn, the projected 2010 margin could be higher than we have estimated. On the basis of these analyses, we believe that IRFs could absorb cost increases and continue to provide care to clinically appropriate Medicare cases with no update to payments in 2011. We will closely monitor our payment update indicators and will be able to reassess our recommendation for the IRF payment update in the next fiscal year.

Spending

- This recommendation would decrease federal program spending relative to current law by between \$50 million and \$250 million in 2011 and by less than \$1 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have adverse impacts on Medicare beneficiaries with respect to access to care or out-of-pocket spending. This recommendation may increase the financial pressure on some providers, but overall a minimal effect on providers' willingness and ability to care for Medicare beneficiaries is expected. ■

Endnotes

- 1 The 13 conditions are stroke; spinal cord injury; congenital deformity; amputation; major multiple trauma; hip fracture; brain injury; neurological disorders (e.g., multiple sclerosis, Parkinson's disease); burns; three arthritis conditions for which appropriate, aggressive, and sustained outpatient therapy has failed; and hip or knee replacement when bilateral, body mass index ≥ 50 , or age 85 or older. These conditions may count toward an IRF meeting the compliance threshold if they are being actively treated in conjunction with the condition that is the primary cause for admission. For more information on Medicare's IRF payment system, see the Commission's payment basics document at http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_IRF.pdf.
- 2 Before January 2010, for Medicare coverage of IRF services for an individual beneficiary, the services had to be reasonable and necessary for treatment of the patient's condition, and it had to be reasonable and necessary to furnish the care on an inpatient hospital basis rather than in a less intensive setting.
- 3 The Health Care Financing Administration administered Medicare and was renamed the Centers for Medicare & Medicaid Services.
- 4 Declassified IRFs that are units in critical access hospitals are paid 101 percent of their costs.
- 5 Members of the rehabilitation community point to the activities of CMS's recovery audit contractors (RACs) operating in a demonstration program in New York, California, and Florida as an additional cause of the reduction in IRF admissions during this period. The RACs—established under Section 306 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003—were charged with identifying and recouping overpayments in FFS Medicare. They have been criticized as being overly aggressive in complying with their mandate with respect to IRFs. Members of the rehabilitation community have also cited increased medical review activities among Medicare fiscal intermediaries and Medicare administrative contractors as leading to reductions in IRF admissions, particularly for joint replacement patients. The rehabilitation community has also criticized these medical review efforts as being overly aggressive.
- 6 The proprietary data come from eRehabData.com, which has data on a subset of IRFs that subscribe to their inpatient rehabilitation outcomes system. eRehabData.com has developed a protocol to assess whether a case satisfies the compliance threshold.
- 7 Scores for each of the 18 FIMTM items range from 1 (complete dependence) to 7 (independence). The scores on the 18 measures are summed to calculate a total score.
- 8 Members of the rehabilitation community attribute some of the cost increases in recent years to the added costs associated with appeals of medical necessity denials by the RACs, the fiscal intermediaries, and the Medicare administrative contractors.
- 9 The freestanding and for-profit IRFs are dominated by one provider chain that accounts for about one-half of freestanding and for-profit IRF capacity and revenues and about one-fifth of capacity and revenues for the industry.
- 10 In 2008, for example, the aggregate margin for hospital-based IRFs with 60 or more beds was 9.0 percent, while that of hospital-based IRFs with 10 or fewer beds was -5.7 percent.
- 11 IRFs received a 3.2 percent market basket update for the first half of 2008, with the base rate returning to the 2007 level for the second half of the year. In fiscal year 2009, the base rate continued at the 2007 level. As a result, the 2009 base rate was 1.6 percent lower than the average base rate for 2008.
- 12 In the fiscal year 2009 IRF final rule, CMS projected that actual outlier payments in fiscal year 2008 would be 3.7 percent of total payments. Consequently, CMS adjusted the outlier threshold for fiscal year 2009 to achieve the standard target of outlier payments equaling 3.0 percent of total payments for fiscal year 2009. This adjustment is projected to result in a 0.7 percentage point decrease in total IRF payments in 2009 relative to 2008 (Centers for Medicare & Medicaid Services 2009).
- 13 This forecast was made in the fourth quarter of 2009. CMS will use the most recent forecast available when setting updates, likely the second quarter 2010 forecast for 2011, which may differ from the number we report here.

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3D SECTION

Long-term care hospital services

R E C O M M E N D A T I O N

- 3D** The Secretary should eliminate the update to the payment rate for long-term care hospitals for rate year 2011.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

SECTION 3D

Long-term care hospital services

Section summary

Long-term care hospitals (LTCHs) furnish care to patients with clinically complex problems—such as multiple acute or chronic conditions—who need hospital-level care for relatively extended periods. To qualify as an LTCH for Medicare payment, a facility must meet Medicare’s conditions of participation for acute care hospitals and have an average length of stay greater than 25 days for its Medicare patients. Medicare is the predominant payer for LTCH services, accounting for about two-thirds of LTCH discharges. In 2008, Medicare spent \$4.6 billion on care furnished in an estimated 386 LTCHs nationwide. About 115,000 beneficiaries had almost 131,000 LTCH stays.

Assessment of payment adequacy

Our payment adequacy indicators for LTCHs, discussed below, suggest that LTCHs are able to operate at the current level of payment. We therefore recommend that the Secretary eliminate the update to payment rates for LTCH services for rate year 2011. We make this recommendation to the Secretary rather than the Congress because the Secretary has the authority to determine updates to payment rates for LTCHs.

Beneficiaries’ access to care—We have no direct measures of beneficiaries’ access to LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services furnished.

In this section

- Are Medicare payments adequate in 2010?
- How should Medicare payments change in 2011?

- ***Capacity and supply of providers***—The Medicare, Medicaid, and SCHIP Extension Act imposed a three-year limited moratorium on new LTCHs and new beds in existing LTCHs. While certain exemptions allowed some new LTCHs to open in 2008, the overall number of LTCHs filing cost reports declined about 1 percent. Counts of LTCHs are sensitive to the data used, however, and some data suggest an increase in LTCHs in 2008.
- ***Volume of services***—Controlling for change in the number of fee-for-service (FFS) beneficiaries, we found that the number of LTCH cases rose 3.6 percent between 2007 and 2008, suggesting that access to care was maintained during that period.

Quality of care—Unlike most other health care facilities, LTCHs do not submit quality data to CMS. Existing measures of quality are not reliable for LTCHs, and new ones need to be developed. The Commission instead uses unadjusted aggregate trends in in-facility mortality, mortality within 30 days of discharge, and readmission to the acute care hospital. Across all diagnoses, rates of death and readmission have remained stable and readmission rates have been stable or declining for the most frequently occurring LTCH diagnoses. The Commission plans to explore the feasibility of developing meaningful quality measures for LTCHs and the data needed for measurement.

Providers' access to capital—Relatively little equity has been raised by LTCH chains in recent months, likely due, at least in part, to the moratorium on new LTCHs, which has reduced opportunities for expansion and therefore reduced the need for capital.

Medicare payments and providers' costs—Between 2007 and 2008, spending per FFS beneficiary climbed 4.7 percent. Even before controlling for FFS enrollment, Medicare spending for LTCH services increased 2.4 percent. Over the same period, costs per case grew 2.1 percent.

The 2008 Medicare margin for LTCHs was 3.4 percent. Due to recent congressional rollbacks of CMS regulations that were designed to reduce payments to LTCHs and to anticipated improvements in provider documentation and coding, we expect payments per discharge to increase in 2010 without corresponding growth in provider costs. As a result, we estimate LTCHs' aggregate Medicare margin will be 5.8 percent in 2010. ■

Background

Patients with clinically complex problems, such as multiple acute or chronic conditions, may need hospital-level care for relatively extended periods. Some are treated in long-term care hospitals (LTCHs). These facilities can be either freestanding or colocated with other hospitals as hospitals within hospitals (HWHs) or satellites. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay greater than 25 days for its Medicare patients. (By comparison, the average Medicare length of stay in acute care hospitals is about five days.) Because of the relatively long stays and the level of care provided, care in LTCHs is expensive. Medicare is the predominant payer for LTCH services, accounting for about two-thirds of LTCH discharges. In 2008, Medicare spent \$4.6 billion on LTCH care.

Since October 2002, Medicare has paid LTCHs prospective per discharge rates based primarily on the patient's diagnosis and the facility's wage index.¹ The prospective payment system (PPS) pays differently for patients who are high-cost outliers and for those whose lengths of stay are substantially shorter than the LTCH average. CMS reduced payment for very short stays in 2006 and again for a smaller group of the very shortest stays in 2007. The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) suspended the 2007 changes until December 29, 2010. (This policy is discussed in detail in the text box on payment for short-stay outliers (p. 253).)

LTCH payment rates are based on the Medicare severity long-term care diagnosis related group (MS-LTC-DRG) patient classification system, which groups patients based primarily on diagnoses and procedures. MS-LTC-DRGs are the same groups used in the acute inpatient PPS but have relative weights specific to LTCH patients, reflecting the average relative costliness of cases in the group compared with that for the average LTCH case.

LTCH discharges are concentrated in a relatively small number of diagnosis groups. In fiscal year 2008, the top 20 LTCH diagnoses made up 55 percent of all LTCH discharges (Table 3D-1, p. 245). The most frequently occurring diagnosis was MS-LTC-DRG 207, respiratory diagnosis with ventilator support for 96 or more hours. Eight of the top 20 diagnoses, representing 30 percent of LTCH patients, were respiratory conditions.

Some LTCHs—both freestanding and those located within acute care hospitals—may function as de facto units of acute care hospitals. Research by the Commission and others has found that patients who use LTCHs have shorter acute care hospital lengths of stay than similar patients who do not use these facilities, suggesting that LTCHs substitute for at least part of the acute care hospital stay.² The Commission has long been concerned about the nature of the services furnished by LTCHs and how patient outcomes compare with those of other, less costly, providers. As a result, the Commission favors using criteria to define the level of care typically furnished in LTCHs (as well as in step-down units of many acute care hospitals and some specialized skilled nursing and inpatient rehabilitation facilities) and to help ensure that beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions.

To discourage patient shifting between host hospitals and their HWHs and satellites, CMS established a new policy—the so-called 25 percent rule—in fiscal year 2005.³ The 25 percent rule uses payment adjustments to limit the percentage of Medicare patients who are admitted from an HWH's or satellite's host hospital and paid for at full LTCH payment rates.⁴ Until criteria can be developed, the 25 percent rule may be a useful, if blunt, tool. But it is a flawed one. Under the 25 percent rule, an LTCH's decision on whether to admit a patient may be based not only on the patient's clinical condition but also on how close the facility is to exceeding its threshold. In addition, as the Commission has previously noted, setting thresholds for only certain types of LTCHs is inequitable, especially given that the distinction between HWHs or satellites and freestanding LTCHs may not be meaningful.⁵ Some HWHs admit patients from a wide network of referring acute care hospitals, while some freestanding LTCHs admit patients primarily from just one acute care hospital.

Beginning in July 2007, CMS extended the 25 percent rule to apply to all LTCHs, thus limiting the percentage of patients who could be admitted to an LTCH from any one referring acute care hospital during a cost-reporting period without being subject to a payment adjustment. However, MMSEA prevented the Secretary from phasing in the application of the 25 percent rule to freestanding LTCHs (see text box on recent legislation affecting LTCHs, p. 244).

Provisions of recent legislation for long-term care hospitals

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) included several provisions related to long-term care hospitals (LTCHs), including changes to the 25 percent rule and changes to the short-stay outlier policy. The American Recovery and Reinvestment Act of 2009 (ARRA) revised some of MMSEA's provisions.

The 25 percent rule

The MMSEA rolled back the phased-in implementation of the 25 percent rule for hospitals within hospitals (HWHs) and satellites, limiting the proportion of Medicare patients who can be admitted from an HWH's or satellite's host hospital during a cost-reporting period to not more than 50 percent and holding it at this level for three years. (The applicable threshold for HWHs and satellites in rural and urban areas with a single or dominant acute care hospital is 75 percent.) ARRA revised the implementation dates for the rollback of the 25 percent rule to July 1, 2007, or October 1, 2007, depending on facilities' cost-reporting periods. The MMSEA prohibits the Secretary from applying the 25 percent rule to freestanding LTCHs until December 29, 2010.

Short-stay outliers

As discussed in the text box (p. 253), Medicare applies different payment rules for LTCH cases with the shortest lengths of stay (so-called "very short-stay outliers"). The MMSEA prohibits the Secretary from applying these rules until December 29, 2010.

Moratorium on new LTCHs

The MMSEA also imposes a three-year moratorium on new facilities and new beds in existing facilities, upon enactment of the Act. The ARRA modified the effective date to July 1, 2007, or October 1, 2007, depending on facilities' cost-reporting periods. Exemptions from the moratorium are allowed for: (1) LTCHs that began their qualifying period demonstrating an average Medicare length of stay greater than 25 days on or before December 29, 2007; (2) entities that had a binding written agreement with an unrelated party for the construction, renovation, lease, or demolition of an LTCH, with at least 10 percent of the estimated cost of the project already expended by or before December 29, 2007; (3) entities that had obtained a state certificate of need on or before December 29, 2007; and (4) existing LTCHs that had obtained a certificate of need for an increase in beds issued on or after April 1, 2005, and before December 29, 2007.

CMS report to the Congress on LTCH facility and patient criteria

The MMSEA requires the Secretary to conduct a study on the use of LTCH facility and patient criteria to determine medical necessity and appropriateness of admission to and continued stay at LTCHs, considering both the Secretary's ongoing work on the subject and Commission recommendations (Medicare Payment Advisory Commission 2004). As this report goes to press, CMS's report was pending. ■

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs providers incur and how much providers' costs should change in the coming year (2011), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries'

access to care by examining the capacity and supply of LTCH providers and changes over time in the volume of services furnished, quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs. Overall, the Medicare payment adequacy indicators signal that LTCHs are able to operate at the current level of payment without an update for 2011.

**TABLE
3D-1****The top 20 MS-LTC-DRGs made up more than half of LTCH discharges in 2008**

MS-LTC-DRG	Description	Discharges	Percent
207	Respiratory system diagnosis with ventilator support 96+ hours	14,986	11.5%
189	Pulmonary edema and respiratory failure	8,745	6.7
871	Septicemia or severe sepsis without ventilator support 96+ hours with MCC	6,482	5.0
177	Respiratory infections and inflammations with MCC	4,340	3.3
592	Skin ulcers with MCC	4,004	3.1
949	Aftercare with CC/MCC	3,752	2.9
193	Simple pneumonia and pleurisy with MCC	2,696	2.1
593	Skin ulcers with CC	2,590	2.0
190	Chronic obstructive pulmonary disease with MCC	2,558	2.0
208	Respiratory system diagnosis with ventilator support <96 hours	2,486	1.9
945	Rehabilitation with CC/MCC	2,275	1.7
178	Respiratory infections & inflammations with CC	1,964	1.5
559	Aftercare, musculoskeletal system & connective tissue with MCC	1,944	1.5
573	Skin graft and/or debridement for skin ulcer or cellulitis with MCC	1,912	1.5
539	Osteomyelitis with MCC	1,903	1.5
682	Renal failure with MCC	1,738	1.3
166	Other respiratory system OR procedures with MCC	1,693	1.3
291	Heart failure & shock with MCC	1,688	1.3
862	Postoperative & post-traumatic infections with MCC	1,672	1.3
919	Complications of treatment with MCC	1,659	1.3
Top 20 MS-LTC-DRGs		71,087	54.3
Total		130,869	100.0

Note: MS-LTC-DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), CC (complication or comorbidity), OR (operating room). MS-LTC-DRGs are the case-mix system for these facilities. Columns may not sum due to rounding.

Source: MedPAC analysis of MedPAR data from CMS.

Beneficiaries' access to care: Difficult to assess but minimal change in capacity and rise in volume of services indicate favorable access

We have no direct measures of beneficiaries' access to LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish.

Capacity and supply of providers: Difficult to assess

As described in the text box, the MMSEA imposed a three-year limited moratorium on new LTCHs and new beds in existing LTCHs. We examined Medicare cost report data to assess the number of LTCHs and found that, though exemptions allowed some new LTCHs to open

in fiscal year 2008, overall the number of LTCHs filing Medicare cost reports declined by a net of three facilities or about 1 percent (Table 3D-2, p. 246).

Use of Medicare's Provider of Service (POS) data, however, depicts a more favorable picture of LTCH capacity and supply. These data show that exemptions from the moratorium allowed 20 new LTCHs to open in fiscal year 2008, while 8 facilities closed, for a net gain of about 3 percent. Examination of POS data for fiscal year 2009 shows that an additional 19 new LTCHs opened last year, while 4 closed.

There are a number of reasons why the two data sources differ. Some Medicare-certified LTCHs may not yet have filed a cost report for 2008 when we undertook our analysis. LTCHs with very low Medicare patient

**TABLE
3D-2****Number of LTCHs by type, 2003–2008**

Type of LTCH	2003	2004	2005	2006	2007	2008	Average annual change		
							2003–2005	2005–2007	2007–2008
All	284	322	373	379	389	386	14.6%	2.1%	–0.8%
Urban	272	307	350	355	363	357	13.4	1.8	–1.7
Rural	12	15	23	24	24	23	38.4	2.2	–4.2
Freestanding	192	207	233	236	238	239	10.2	1.1	0.4
Hospital within hospital	92	115	140	143	151	147	23.4	3.9	–2.6
Nonprofit	64	74	87	86	85	84	16.6	–1.2	–1.2
For profit	200	227	262	269	280	281	14.5	3.4	0.4
Government	20	21	24	24	24	21	9.5	0.0	–12.5
Total certified beds	21,834	23,103	26,534	26,413	26,880	26,578	10.2	0.6	–1.1

Note: LTCH (long-term care hospital). Numbers may not sum to total due to missing data.

Source: MedPAC analysis of Medicare cost report data from CMS.

volume may be exempt from filing cost reports. In both cases, the LTCHs would not be included in the cost report data we analyzed but would be present in the POS data. At the same time, POS data may overstate the total number of LTCHs because facilities that close may not be immediately removed from the file. The cost report data, therefore, provide a more conservative estimate of capacity and supply. Further, Commission analysis revealed inaccuracies in ownership status in the POS data, so we opted to rely on cost report data to determine the distribution of facilities across the ownership and location categories shown in Table 3D-2.⁶

LTCHs are not distributed evenly across the nation. Some areas have many LTCHs; others have none (Figure 3D-1). In 2008, Massachusetts led the nation with the highest number of LTCH beds per 10,000 beneficiaries (30), followed by Rhode Island (29) and Louisiana (28). By contrast, Oregon, Iowa, and Washington have about 1 LTCH bed per 10,000 beneficiaries, while Hawaii has 0.5 LTCH bed per 10,000 beneficiaries, and 4 states have no LTCH beds at all.⁷ Many LTCHs that have entered the Medicare program since implementation of the LTCH PPS have located in markets where LTCHs already existed instead of opening in new markets. This trend is somewhat surprising because these facilities are supposed to be

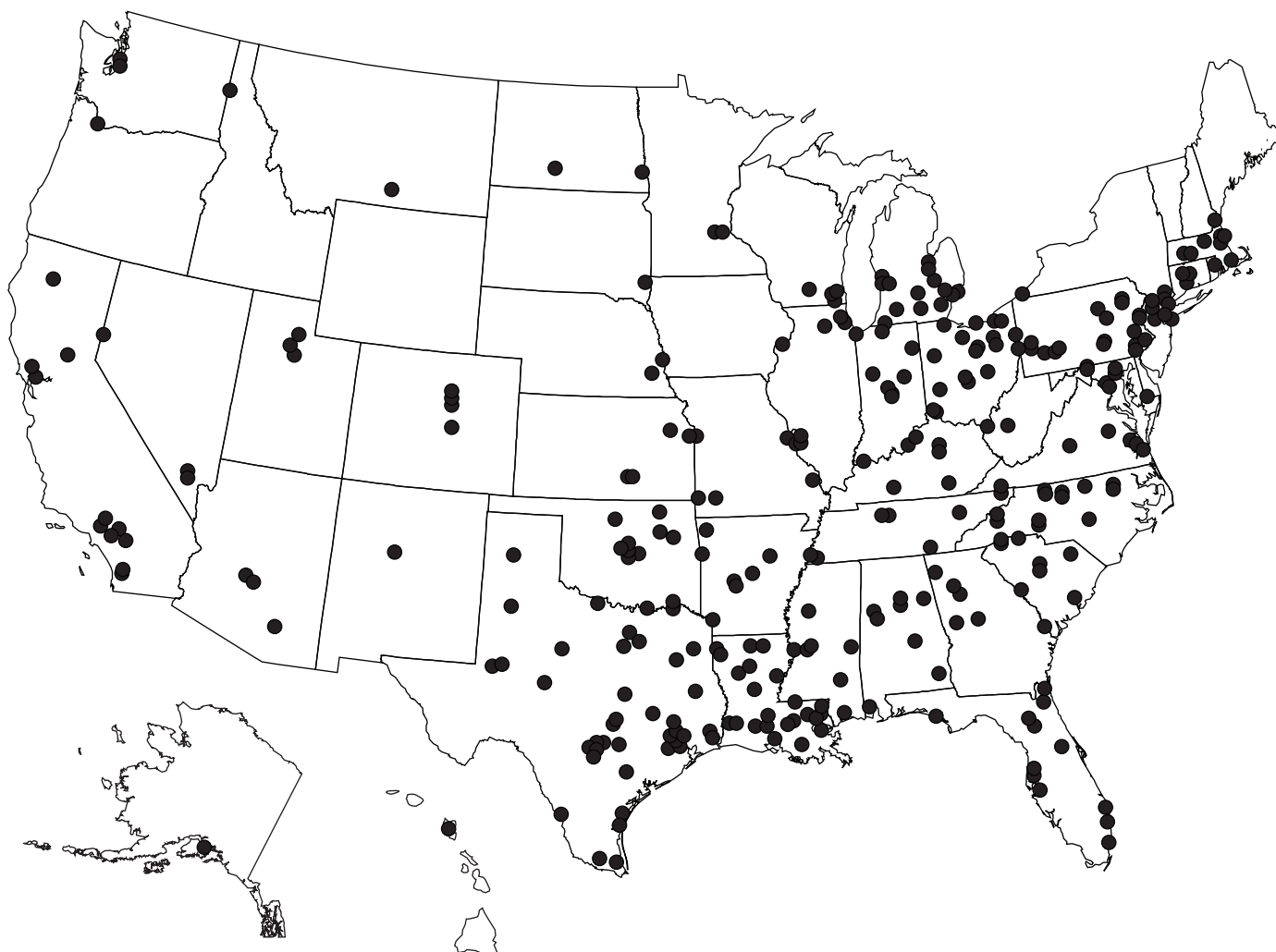
serving unusually sick patients, and one would expect such patients to be relatively rare. The uneven distribution of LTCHs indicates that medically complex patients can be treated appropriately in other settings, making it difficult to assess the need for LTCH care and therefore the adequacy of supply.

Volume of services: Use of LTCHs by FFS beneficiaries continues to rise

Beneficiaries' use of services suggests that access has not been a problem. Controlling for the change in the number of fee-for-service (FFS) beneficiaries, we found that the number of LTCH cases rose 3.6 percent between 2007 and 2008, suggesting that access to care was maintained during this period (Table 3D-3, p. 248). A precise assessment of volume changes, however, is difficult because there are no criteria defining LTCH patients. Therefore, counting numbers of patients in LTCHs may not capture the extent of access beneficiaries have to that level of care; that is, not all patients treated in LTCHs may require that level of care, just as patients who do need that level of care often receive it in acute care hospitals. Demographic characteristics of Medicare beneficiaries admitted to LTCHs in 2008 are shown in Table 3D-4, p. 249.

**FIGURE
3D-1**

Long-term care hospitals are not distributed evenly across the nation



Source: MedPAC analysis of 2008 Provider of Service file and Medicare cost report data from CMS.

Quality of care: Meaningful measures not currently available while gross indicators show stability

Unlike most other health care facilities, LTCHs do not submit quality data to CMS. In the past, the Commission has used selected Agency for Healthcare Research and Quality (AHRQ) patient safety indicators (PSIs) to measure adverse events across all LTCHs using claims data. The Commission has always been cautious in interpreting the results of PSI measurements in LTCHs because the indicators were developed specifically for use in acute care hospitals. Further, the PSI rates can

be affected by changes in coding practices unrelated to quality issues (Agency for Healthcare Research and Quality 2007). This year, in light of additional information about the validity of certain PSIs, the Commission has opted not to rely on them as indicators of quality of care in LTCHs. AHRQ recently completed an evaluation of its PSIs and made recommendations about their use in public reporting and pay-for-performance initiatives (Agency for Healthcare Research and Quality 2009). Many PSIs remain reliable indicators of potential quality problems, but two of the four PSIs historically used by the Commission to monitor trends in LTCH quality (decubitus ulcers and postoperative pulmonary embolism and

**TABLE
3D-3****Medicare LTCH spending per FFS beneficiary continues to rise**

	2003	2004	2005	2006	2007	2008	Average annual change		
							2003–2005	2005–2007	2007–2008
Cases	110,396	121,955	134,003	130,164	129,202	130,869	10.2%	–1.8%	1.3%
Cases per 10,000 FFS beneficiaries	30.8	33.4	36.4	36.0	36.4	37.7	8.8	0.0	3.6
Spending (in billions)	\$2.7	\$3.7	\$4.5	\$4.5	\$4.5	\$4.6	29.1	0.0	2.4
Spending per FFS beneficiary	\$75.2	\$101.3	\$122.2	\$124.3	\$126.7	\$132.6	27.5	1.8	4.7
Payment per case	\$24,758	\$30,059	\$33,658	\$34,859	\$34,769	\$35,200	16.6	1.6	1.2
Length of stay (in days)	28.8	28.5	28.2	27.9	26.9	26.7	–1.0	–2.3	–0.7

Note: LTCH (long-term care hospital), FFS (fee-for-service).

Source: MedPAC analysis of MedPAR data from CMS.

deep vein thrombosis) were frequently found to capture conditions that are present on admission, thus potentially contaminating the results of measurements covering the entire LTCH stay. AHRQ did not evaluate the other two PSIs used by the Commission (postoperative sepsis and infection due to medical care) because the implementation of new coding guidelines and new codes required major respecifications of the indicators.⁸

Currently, the Commission uses trends in in-facility mortality, mortality within 30 days of discharge, and readmission to acute care as unadjusted aggregated indicators of quality. We focus on examining trends, rather than levels, because levels can reflect both planned readmissions and unplanned incidents as well as coding practices. We consider these indicators for the top 15 LTCH diagnoses, which in 2008 accounted for 48 percent of all LTCH cases. We found that readmission rates have been stable or declining for most of these diagnoses. Trends in rates of death in LTCHs and death within 30 days of discharge from an LTCH are more difficult to interpret for individual diagnoses, but across all diagnoses these rates have remained stable.

Concerned about the lack of reliable quality measures for LTCHs, the Commission is planning to explore development of these measures with expert panels to help identify meaningful measures and the data needed for

measurement. We also plan to assess the feasibility of risk-adjusted quality measurement at the provider level.

Providers' access to capital: Improving but still limited

Access to capital allows LTCHs to maintain and modernize their facilities. If LTCHs were unable to access capital, it might in part reflect problems with the adequacy of Medicare payments, since Medicare provides about 70 percent of LTCH revenues. In our March 2009 report, we noted that the economy wide credit crisis meant that LTCHs' difficulty accessing capital at that time told us little about Medicare payment adequacy. One year later, credit markets are operating in a more normal manner. But the three-year moratorium on new beds and facilities imposed by the MMSEA has reduced (but not eliminated) opportunities for expansion and need for capital. Overall it appears that relatively little equity has been raised by LTCH chains in recent months, with two notable exceptions.

In September 2009, Select Medical Corp., one of the two largest LTCH chains, raised \$279.1 million in an initial public stock offering. In addition, publicly owned RehabCare Group announced in November 2009 that it had completed its merger with private-equity-funded Triumph. The merger makes RehabCare Group the third largest LTCH provider, behind Select and Kindred.

**TABLE
3D-4****Characteristics of Medicare
beneficiaries using LTCHs, 2008**

Characteristic	Percent of beneficiaries
Sex	
Female	52%
Male	48
Race	
White, non-Hispanic	74
African American, non-Hispanic	19
Hispanic	4
Other	3
Age	
<65	22
65-74	30
75-84	31
85+	18

Note: LTCH (long-term care hospital). Columns may not sum due to rounding.

Source: MedPAC analysis of MedPAR data from CMS

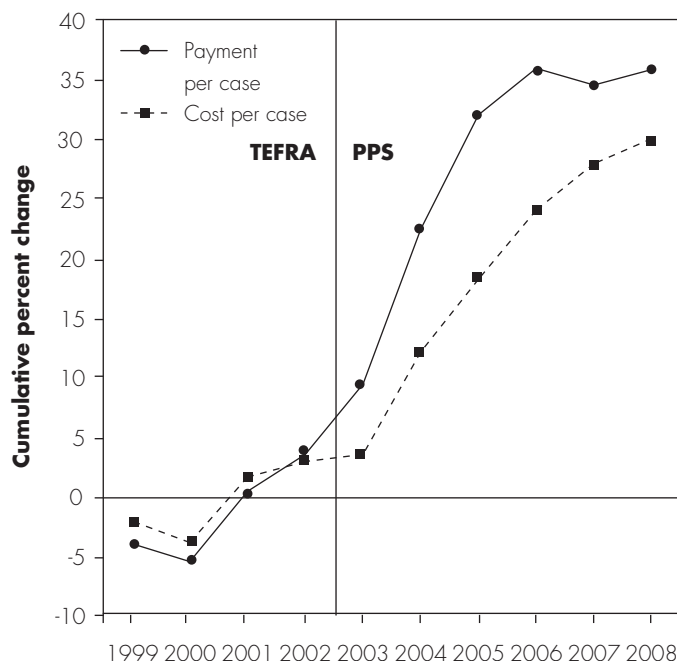
Medicare payments and providers' costs

In the first three years of the LTCH PPS, Medicare spending for LTCH services grew rapidly, climbing an average of 29 percent per year (Table 3D-3). Between 2005 and 2007, however, payments held steady at \$4.5 billion due to changes in payment policies and growth in the number of beneficiaries enrolling in Medicare Advantage plans, whose LTCH use is not included in these totals. Between 2007 and 2008, spending began to tick upward, rising 2.4 percent. Medicare spending per FFS beneficiary rose almost twice as much, climbing 4.7 percent. CMS estimates that total Medicare spending for LTCH services will be \$4.8 billion in 2010 and will reach \$5.2 billion in 2013 (Bean 2009).

Payment per case increased rapidly after the PPS was implemented, climbing 16.6 percent between 2003 and 2005. Cost per case also increased rapidly during this period, albeit at a slower pace (Figure 3D-2). More recently, growth in both payment per case and cost per case has slowed. LTCHs appear to be responsive to changes in payments, adjusting their costs per case when payments per case change. Although payments were significantly higher than costs, the rise in cost per case from 2000 to 2006 roughly paralleled growth in payments

per case. The gap between payment and cost growth narrowed in 2007 but held steady between 2007 and 2008.

Much of the growth in payments since the PPS was implemented has been due to an increase in the reported patient case-mix index, which, in principle measures the expected costliness of a facility's patients. Between fiscal years 2003 and 2004, the reported case-mix index increased an estimated 6.75 percent. Estimated increases in 2005, 2006, and 2007 were 3.5 percent, 1.9 percent, and 3.1 percent, respectively (Centers for Medicare & Medicaid Services 2006, Centers for Medicare & Medicaid Services 2007, Centers for Medicare & Medicaid Services 2008, Centers for Medicare & Medicaid Services 2009). But not all the growth in reported case mix was due to changes in the intensity and complexity of patients admitted to LTCHs. Some of the reported case-mix growth was due to improvements in documentation and coding that were unrelated to changes in complexity and intensity. Experience suggests that the introduction of new case-mix

**FIGURE
3D-2****The gap between LTCH payments
and costs held steady in 2008**

Note: LTCH (long-term care hospital), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Data are from consistent two-year cohorts of LTCHs.

Source: MedPAC analysis of Medicare cost report data from CMS.

**TABLE
3D-5****Medicare margins, by type of LTCH**

Type of LTCH	Share of discharges	2001	2002	2003	2004	2005	2006	2007	2008
All	100%	-1.6%	-0.1%	5.2%	9.0%	11.9%	9.8%	4.8%	3.4%
Urban	94	-1.6	-0.1	5.2	9.2	11.9	10.0	4.9	3.6
Rural	4	-2.7	-0.5	5.2	2.6	10.0	4.9	-0.5	-2.3
Freestanding	71	-1.3	0.1	5.4	8.1	11.2	9.0	5.2	3.7
Hospital within hospital	29	-2.1	-0.5	5.0	9.9	12.5	10.5	4.3	3.1
Nonprofit	17	-1.8	0.1	2.0	6.7	9.0	6.5	1.8	-2.0
For profit	81	-1.4	-0.1	6.3	10.0	13.0	11.0	5.7	4.9
Government*	2	-4.9	-2.6	-1.1	-0.7	0.3	-1.1	-4.4	-10.1

Note: LTCH (long-term care hospital). Columns may not sum to 100 percent due to rounding or missing data.

*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of Medicare cost report data from CMS.

classification systems and subsequent refinements to those systems usually lead to more complete documentation and coding of the diagnoses, procedures, services, comorbidities, and complications that are associated with payment (Centers for Medicare & Medicaid Services 2009, Medicare Payment Advisory Commission 2007, RAND Corporation 1990). Those changes can raise the average case-mix index under the new or refined classification system, even though patients are no more resource intensive than they were previously. Changes to a classification system can therefore lead to unwarranted increases in payments to providers.

Increases in the case-mix index due to documentation and coding improvements can be expected to plateau over time, as LTCHs become familiar with the classification system. Facilities' experience with the system may have helped to dampen annual growth in payments per case. However, with the introduction in October 2007 of the MS-LTC-DRGs, Medicare's refined case-mix classification system, we expected that improvements in LTCHs' documentation and coding of diagnoses and procedures would lead to increases in reported case mix (Medicare Payment Advisory Commission 2007, Medicare Payment Advisory Commission 2009). CMS estimates that the case-mix increase attributable to documentation and coding improvements between 2007 and 2008 was 1.3 percent (Centers for Medicare & Medicaid Services 2009).

After the LTCH PPS was implemented in 2003, margins rose rapidly for all LTCH provider types, climbing from -0.1 percent in 2002 to 11.9 percent in 2005 (Table 3D-5). At that point, Medicare margins began to decline, as growth in payments per case leveled off. The Medicare margin in 2008 for LTCHs was 3.4 percent.

Financial performance in 2008 varied across LTCHs. The aggregate Medicare margin for for-profit LTCHs (which account for 81 percent of all Medicare discharges from LTCHs) was 4.9 percent, compared with -2.0 percent for nonprofit facilities (which account for 17 percent of all Medicare LTCH discharges). Rural LTCHs' aggregate margin was -2.3 percent, compared with 3.6 percent for their urban counterparts. Rural providers account for about 6 percent of all LTCHs. They tend to be smaller than urban LTCHs, caring for a lower volume of patients on average, which may result in poorer economies of scale.

A quarter of all LTCHs had margins in excess of 11.8 percent, while another quarter had margins below -8.2 percent. As with skilled nursing facilities and home health agencies, lower unit costs—rather than higher payments—drove the differences in financial performance between LTCHs with the lowest and highest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins). Low-margin LTCHs had standardized costs per discharge that were almost 50 percent higher than

high-margin LTCHs (\$38,314 vs. \$26,058) (Table 3D-6). Lengths of stay were two days longer in low-margin LTCHs. On average, low-margin LTCHs received 40 percent of their referrals from their primary referring acute care hospital, compared with 35 percent for high-margin LTCHs. Low-margin LTCHs were also far less likely to be for profit than were their high-margin counterparts.

High-cost outlier payments per discharge for low-margin LTCHs were more than double those of high-margin LTCHs (\$4,984 vs. \$2,176). At the same time, short-stay outliers made up a larger share of low-margin LTCHs' cases. Low-margin LTCHs thus cared for disproportionate shares of patients who are high-cost outliers and patients who have shorter stays. Both types of patients can have a negative effect on LTCHs' margins. LTCHs lose money on high-cost outlier cases since, by definition, they generate costs that exceed payments.⁹ Further, as discussed in the text box (p. 253), cases that are short-stay outliers may receive reduced payments.

Low-margin LTCHs served fewer patients overall (an average of 419 in 2008 compared with 577 for high-margin LTCHs). Poorer economies of scale may therefore have affected low-margin LTCHs' costs. We observed this same correlation in rural facilities, as described above. A critical mass of patients might be needed to achieve economies of scale. The Commission has also pointed out previously that a critical mass of medically complex patients might be needed to maintain expertise and achieve a high quality of care (Medicare Payment Advisory Commission 2008, Medicare Payment Advisory Commission 2009). If that is the case, then the proliferation of LTCHs in some markets might be cause for concern. To ensure that providers have the necessary experience and adequate resources to care for medically complex patients, CMS might appropriately view LTCHs (and other providers of medically complex care) as regional referral centers, serving wider catchment areas. Such referral centers for medically complex patients may be able to provide more value for the Medicare program by achieving better outcomes with greater efficiency. The development of facility and patient criteria, which the Commission has long advocated, is an important step in implementing this type of care model. Such criteria would define the desired level of care—whether furnished in an LTCH, acute care hospital, specialized skilled nursing facility, or inpatient rehabilitation facility—and the staff credentials, service capabilities, and volume levels needed to furnish this level of care.

**TABLE
3D-6**

**LTCHs in the top quartile
of Medicare margins in 2008
had much lower costs**

Characteristics	High-margin LTCHs	Low-margin LTCHs
Mean total discharges (all payers)	577	419
Medicare share	66%	61%
Average length of stay (in days)	27	29
Mean per discharge:		
Standardized costs	\$26,058	\$38,314
Medicare payment	\$38,297	\$37,896
High-cost outlier payments	\$2,176	\$4,984
Share of:		
Cases that are SSOs	28%	35%
Medicare cases from primary-referring ACH	35	40
LTCHs that are for profit	88	57

Note: LTCH (long-term care hospital), SSO (short-stay outlier), ACH (acute care hospital). High-margin LTCHs were in the top 25 percent of the distribution of Medicare margins. Low-margin LTCHs were in the bottom 25 percent of the distribution of Medicare margins. Standardized costs have been adjusted for differences in case mix and area wages. Cases from primary referring ACH indicates the mean share of patients who are referred to LTCHs from each LTCH's primary referring ACH.

Source: MedPAC analysis of LTCH cost reports and MedPAR data from CMS.

To estimate 2010 payments and costs with 2008 data, the Commission considered policy changes effective in 2009 and 2010. Those that affect our estimate of the 2010 Medicare margin include:

- A market basket increase of 3.6 percent for 2009, offset by an adjustment for past coding improvements and an adjustment to account for changes in law that reduced payments for rate year 2008, for a net update of 1.9 percent;¹⁰
- A market basket increase of 2.5 percent for 2010, offset by an adjustment for past coding improvements, for a net update of 2 percent;
- Implementation of the MS-LTC-DRGs in 2008 and the reweighting of them in 2009, which on net we expect will continue to result in improved coding and documentation and thus increase payments;
- An adjustment to the high-cost outlier fixed loss amount for 2010, which increases payments; and

- Changes to the wage index in 2009 and 2010, which decrease payments.

We estimate that LTCHs' aggregate Medicare margin will be 5.8 percent in 2010.

How should Medicare payments change in 2011?

The Secretary has discretion to update payments for LTCHs; there is no congressionally mandated update. In view of LTCHs' responsiveness to changes in payments, we expect growth in costs to continue at the current pace—roughly similar to the latest forecast of the market basket for 2011 of 2.4 percent—as long as Medicare continues to put fiscal pressure on LTCHs.

Update recommendation

On the basis of our review of payment adequacy for LTCHs, the Commission recommends that the Secretary eliminate the update to the LTCH payment rates.

RECOMMENDATION 3D

The Secretary should eliminate the update to the payment rate for long-term care hospitals for rate year 2011.

RATIONALE 3D

In sum, the number of cases per FFS beneficiary has increased, suggesting that access to care has been maintained. In addition, growth in payments per case has continued. The quality trends we measure appear stable. Under the current moratorium on LTCH growth, LTCHs' need for capital is limited. Margins are positive and are expected to increase. These trends suggest that LTCHs are able to operate within current payment rates. We will closely monitor our payment update indicators and will be able to reassess our recommendation for the LTCH payment update in the next fiscal year.

IMPLICATIONS 3D

Spending

- Because CMS typically uses the market basket as a starting point for establishing updates to LTCH payments, this recommendation decreases federal program spending by between \$50 million and \$250 million in one year and by less than \$1 billion over five years.

Beneficiary and provider

- This recommendation is not expected to affect Medicare beneficiaries' access to care or providers' ability to furnish care. ■

Payments for short-stay outliers in long-term care hospitals

In the long-term care hospital (LTCH) payment system, a short-stay outlier (SSO) is a patient with a shorter-than-average length of stay. The SSO policy reflects CMS's contention that patients with lengths of stay similar to those in acute care hospitals should be paid at rates comparable to those under the acute care hospital prospective payment system. About 32 percent of LTCH discharges receive payment adjustments for having shorter-than-average lengths of stays, but this share varies across types of cases.¹¹

The amount Medicare pays to LTCHs for an SSO case is the lowest of:

- 100 percent of the cost of the case,
- 120 percent of the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) specific per diem amount multiplied by the patient's length of stay,
- The full MS–LTC–DRG payment, or
- A blend of the inpatient prospective payment system (IPPS) amount for the DRG and 120 percent of the MS–LTC–DRG per diem payment amount.¹²

Generally, for the same DRG, the LTCH payment is greater than the payment under the IPPS. CMS estimates that in 2008 about 67 percent of SSO cases

were paid on a cost basis (Centers for Medicare & Medicaid Services 2009).

Effective July 2007, Medicare applied a different standard for the very shortest SSO cases ("very SSOs"). These cases, which represented about 16 percent of LTCH admissions in 2007, are those in which length of stay is less than or equal to the average length of stay for the same DRG at acute care hospitals paid under the IPPS plus one standard deviation. For SSO cases that meet the IPPS comparable threshold, LTCHs were to be paid the lowest of:

- 100 percent of the cost of the case,
- 120 percent of the MS–LTC–DRG specific per diem amount multiplied by the patient's length of stay,
- The full MS–LTC–DRG payment, or
- The IPPS per diem amount multiplied by the length of stay for the case, not to exceed the full IPPS amount.

The Medicare, Medicaid, and SCHIP Extension Act of 2007 prohibited the Secretary from applying the very SSO standard for a three-year period beginning December 29, 2007. Very SSO cases are now paid at the same rate as other SSO cases. ■

Endnotes

- 1 More information on the prospective payment system for LTCHs is available at: http://medpac.gov/documents/MedPAC_Payment_Basics_09_LTCH.pdf.
- 2 About 80 percent of Medicare LTCH patients are admitted from an acute care hospital. The remainder do not have a preceding acute care hospital stay.
- 3 CMS implemented the 25 percent rule to discourage acute care hospitals from unbundling services covered under the inpatient PPS and to discourage inappropriate payments under the LTCH PPS (Centers for Medicare & Medicaid Services 2004).
- 4 HWHs and satellites are paid LTCH PPS rates for patients admitted from the host acute care hospital until the percentage of discharges from the host hospital exceeds the threshold for that year. After the threshold is reached, the LTCH is paid the lesser of the LTCH PPS rate or an amount equivalent to the acute care hospital PPS rate for patients discharged from the host acute care hospital. Patients from the host hospital who are outliers under the acute hospital PPS before their discharge to the HWH or satellite do not count toward the threshold and continue to be paid at the LTCH PPS rate even if the threshold has been reached.
- 5 This inequity is exacerbated by CMS's interpretation of Section 114 of the Medicare, Medicaid, and SCHIP Extension Act of 2007, under which different thresholds are applied to HWHs and satellite LTCHs depending on how long they have been operating.
- 6 Overall, 18 percent of the active LTCHs in the POS file in fiscal year 2008 had an ownership status (for profit, not-for-profit, or government) that conflicted with the status indicated on the LTCH's cost report for the corresponding year. Most of these LTCHs were proprietary LTCHs incorrectly listed as voluntary facilities in the POS file.
- 7 Maine, New Hampshire, Vermont, and Wyoming have no LTCH beds.
- 8 The PSI "infection due to medical care" was recently limited to central line-associated infections.
- 9 LTCHs are paid outlier payments for patients who are extraordinarily costly. High-cost outlier cases are identified by comparing their costs with a threshold that is the MS-LTC-DRG payment for the case plus a fixed loss amount. (In 2010 the fixed loss amount is \$18,425.) Medicare pays 80 percent of the LTCHs' costs above the threshold.
- 10 The MMSEA specified that the base rate for LTCH discharges occurring in the fourth quarter of rate year (RY) 2008 would be the same as the base rate for discharges occurring during rate year 2007, thereby eliminating the 2008 0.71 percent increase for discharges in the fourth quarter of RY 2008. CMS therefore applied the market basket increase for RY 2009 to the base rate that was in effect during the fourth quarter of RY 2008.
- 11 Lower payments are triggered for LTCH patients with a length of stay less than or equal to five-sixths of the geometric mean length of stay for the patient's Medicare severity long-term care diagnosis related group. A geometric mean is derived by multiplying all numbers in a set and raising that product to the exponent of one divided by the number of cases in the set. This statistic is useful for analyzing data that are skewed. SSO cases that are very costly may qualify for high-cost outlier payments.
- 12 For the blended alternative, the LTCH per diem payment amount makes up more of the total payment amount as the patient's length of stay approaches the geometric mean length of stay for the LTC-DRG.

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CHAPTER 4

The Medicare Advantage program

R E C O M M E N D A T I O N S

(For previous recommendations on improving the Medicare Advantage program, see text box on p. 261.)

The Medicare Advantage program

Chapter summary

The Medicare Advantage (MA) program allows Medicare beneficiaries to receive benefits from private plans rather than from the traditional fee-for-service (FFS) program. The Commission supports private plans in the Medicare program; beneficiaries should be able to choose between the traditional FFS Medicare program and the alternative delivery systems that private plans can provide. Private plans have greater potential to innovate and to use care management techniques and, if paid appropriately, would have more incentive to do so.

The Commission also supports financial neutrality between FFS and the MA program. Financial neutrality means that the Medicare program should not pay MA plans more than it would have paid for the same set of services under FFS. Currently, Medicare spends more under the MA program than under FFS for similar beneficiaries. This higher spending results in increased government outlays and higher beneficiary Part B premiums (including higher premiums for beneficiaries in FFS) at a time when both the Medicare program and its beneficiaries are under increasing financial stress.

Most indicators of program performance—enrollment, plan availability, and quality of care—are generally positive or stable, but another measure—costliness—precludes MA from achieving its goal to be efficient relative to

In this chapter

- Current status of the MA program

FFS. MA enrollment continued to grow through 2009. Compared to 2008, when 22 percent of beneficiaries were enrolled in MA plans, as of November 2009, 24 percent of Medicare beneficiaries—10.9 million—were enrolled in nearly 4,890 MA plans. Payments to MA plans increased from \$93 billion in 2008 to \$110 billion in 2009. This amount represents 26 percent of all Medicare expenditures in 2009. In 2009, Medicare spent roughly \$14 billion dollars more for the beneficiaries enrolled in MA plans than it would have spent if they had stayed in FFS Medicare. To support the extra spending, Part B premiums were higher for all Medicare beneficiaries (including those in FFS). CMS estimated that the Part B premium was \$3.35 per month higher in 2009 than it would have been if spending for MA enrollees had been the same as in FFS.

In 2010, an MA plan of some type is available to all Medicare beneficiaries and a coordinated care plan is available to almost all. Eighty-five percent of beneficiaries have access to an MA plan that includes Part D drug coverage and has no premium (beyond the Medicare Part B premium), and access to MA special needs plans is greater than in 2009. On average, beneficiaries can choose from 21 different plans in their county of residence. ■

Previous Commission recommendations on the Medicare Advantage program

Medicare Advantage (MA) recommendations from the June 2005 report are summarized below:

The Congress should set the benchmarks that CMS uses to evaluate MA plan bids at 100 percent of the fee-for-service (FFS) costs. The Commission has consistently supported the concept of financial neutrality between payment rates for the FFS program and private plans.

In conjunction with the preceding recommendation, the Commission recommended that **the Congress should**

also redirect Medicare's share of savings from bids below the benchmarks to a fund that would redistribute the savings back to MA plans based on quality measures. Pay-for-performance should apply in MA to reward plans that provide higher quality care.

The Secretary should calculate clinical measures for the FFS program that would permit CMS to compare the FFS program with MA plans. The Commission believes more can be done to facilitate beneficiary choice and decision making by enabling a direct comparison between the quality of care in private plans and quality in the FFS system. ■

Current status of the MA program

By some measures, the Medicare Advantage (MA) program appears to be successful, but excessive payment rates preclude the program from achieving desired efficiencies. MA enrollment continues to increase, MA plans are widely available to beneficiaries, and plans provide enhanced benefits for their members. However, taxpayers and beneficiaries in traditional FFS Medicare subsidize these benefits, often at a high cost. Therefore, over the past few years the Commission has made several recommendations to improve the MA program (see text box).

Our analysis of the MA program uses the most recent data available and reports results by plan type. The plan types are:

- **HMOs and local preferred provider organizations (PPOs)**—These plans have provider networks and can use tools such as selective contracting and utilization management to coordinate and manage care. These plans can choose to serve individual counties and can vary their premiums and benefits across counties.
- **Regional PPOs**—These plans are required to offer a uniform benefit package and premium across designated regions made up of one or more states. They are the only plan type required to have limits, or caps,

on out-of-pocket expenditures. Regional PPOs have less extensive network requirements than local PPOs.

- **Coordinated care plans (CCPs)**—This category includes all HMOs, local PPOs, and regional PPOs.
- **Private FFS (PFFS) plans**—These plans typically do not have provider networks. They use Medicare FFS payment rates, have fewer quality reporting requirements, and have less ability to coordinate care than other plan types.

Two additional plan classifications cut across plan types. First are special needs plans (SNPs), which offer benefits packages tailored to specific populations (i.e., beneficiaries who are dually eligible for Medicare and Medicaid, institutionalized, or have a chronic condition). SNPs must be CCPs. Second are employer-group plans, which are available only to Medicare beneficiaries who are members of employer or union groups that contract with those plans. Employer-group plans may be any plan type. Both SNPs and employer-group plans are included in our plan data, with the exception of plan availability figures, as these plans are not available to all beneficiaries.

Plan enrollment grew in 2009

From November 2008 to November 2009, enrollment in MA plans grew by 10 percent, or 1.0 million enrollees, to 10.9 million beneficiaries, or 24 percent of all Medicare beneficiaries (Table 4-1, p. 262).

**TABLE
4-1****Medicare Advantage enrollment grew rapidly in 2009**

	MA enrollment (in millions)		Percent change	2009 MA enrollment as a share of total Medicare
	November 2008	November 2009		
Total	9.9	10.9	10%	24%
Urban	8.5	9.3	9	26
Rural	1.4	1.6	14	15
Plan type				
CCP	7.6	8.4	12	18
HMO	6.5	7.0	7	15
Local PPO	0.7	1.0	42	2
Regional PPO	0.3	0.4	42	1
PFFS	2.3	2.4	7	5
Restricted availability plans included in totals above				
SNPs*	1.3	1.4	5	3
Employer group*	1.7	1.9	12	4

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), PFFS (private fee-for-service), SNPs (special needs plans). CCP includes HMO, local PPO, and regional PPO. Totals may not sum due to rounding.

* SNPs and employer group plans have restricted availability and their enrollment is included in the statistics by plan type and location. They are presented separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of CMS enrollment files.

Enrollment patterns differed in urban and rural areas. A larger share of urban Medicare beneficiaries are enrolled in MA (26 percent) than beneficiaries residing in rural counties (15 percent), even though plan enrollment grew at a faster rate in rural areas (about 14 percent) than in urban areas (9 percent) between 2008 and 2009.¹ As of last year, 54 percent of rural MA enrollees were in PFFS plans, compared with about 17 percent of urban enrollees (not shown in Table 4-1).

The percentage of Medicare beneficiaries enrolled in MA plans varies widely by local area. In some metropolitan areas, fewer than 2 percent of Medicare beneficiaries are enrolled in MA plans. Meanwhile, more than 50 percent of Medicare beneficiaries are enrolled in MA plans in other areas. (Pittsburgh, PA, has 59 percent of beneficiaries enrolled in plans; in Puerto Rico, in some areas 70 percent of Medicare beneficiaries are enrolled.)

Among plan types, HMOs continued to enroll the most beneficiaries, with 15 percent of all Medicare beneficiaries in HMOs in 2009. All plan types (HMO, PPO, and PFFS) had enrollment growth between 2008 and 2009: In 2009, PFFS had about 2.4 million enrollees, an increase of 7 percent; CCP enrollment grew 12 percent, or by about

800,000 enrollees; and SNP enrollment and employer-group enrollment also continued to grow.

Enrollment growth in 2009 continued a trend begun in 2003 (Figure 4-1). Enrollment more than doubled in the last five years. Some plan types grew more rapidly than others. Since 2005, PFFS grew 11-fold compared with 65 percent for CCPs.

Plan availability remains high for 2010

Access to MA remains high in 2010, and Medicare beneficiaries have access to a large number of plans, with the total number of plans offered at 4,890 as of November 2009. While almost all beneficiaries have had access to some type of MA plan since 2006, local CCP plans are more widely available in 2010 than in previous years (Table 4-2). In 2010, 91 percent of Medicare beneficiaries have an HMO or local PPO plan operating in their county of residence, up from 88 percent in 2009 and 67 percent in 2005. In contrast, access to regional PPOs decreased between 2009 and 2010, from 91 percent down to 86 percent. The decrease was the result of the only insurer in two regions deciding to withdraw its regional PPO product for 2010. PFFS plans continue to be available to almost all beneficiaries.

In 2010, 85 percent of Medicare beneficiaries have access to at least one MA plan that includes Part D drug coverage and has no premium (beyond the Medicare Part B premium) compared with 94 percent in 2009.

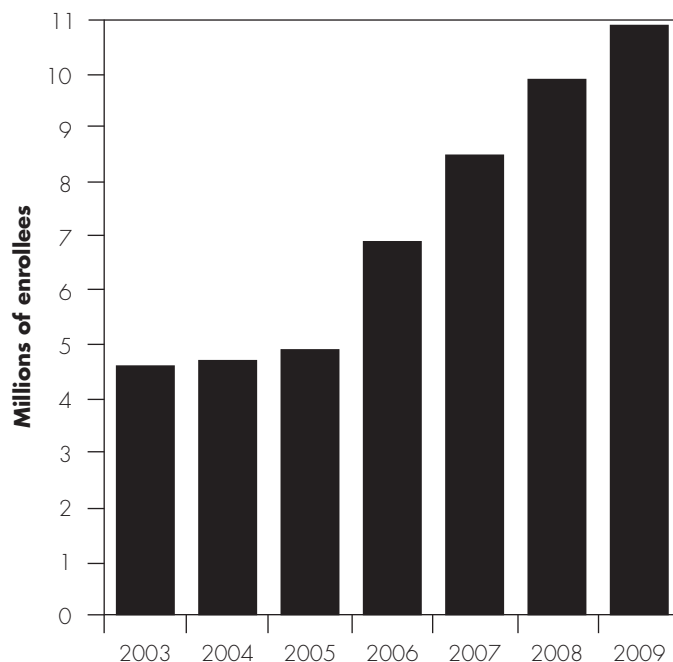
The availability of SNPs (not shown in Table 4-2) has changed slightly and varies by type of special needs population served. In 2010, 79 percent of beneficiaries reside in areas where SNPs serve beneficiaries who are dually eligible for Medicare and Medicaid (up from 76 percent in 2009), 49 percent live where SNPs serve institutionalized beneficiaries (down from 53 percent), and 63 percent live where SNPs serve beneficiaries with chronic conditions (down from 72 percent).

A large number of plans are available to beneficiaries

In most counties, a large number of plans are available to beneficiaries, although the number varies by county. For example, in Broward County, FL, beneficiaries can choose from 69 plans, while a few counties in the country have none (they represent less than 0.5 percent of the beneficiary population). On average, 21 plans are offered in each county in 2010, down from 34 plans in 2009. There are two principal reasons for this decrease. First, CMS has made an effort to decrease the number

FIGURE 4-1

Medicare Advantage enrollment has grown rapidly over the past four years



Source: CMS monthly Medicare Advantage enrollment reports.

TABLE 4-2

Access to Medicare Advantage plans remains high

Percent of beneficiaries with access to MA plans by type

Type of plan	2005	2006	2007	2008	2009	2010
All plan types*	84%	100%	100%	100%	100%	100%
CCP						
HMO or local PPO	67	80	82	85	88	91
Regional PPO	N/A	87	87	87	91	86
PFFS	45	80	100	100	100	100
Zero-premium plans with Part D	N/A	73	86	88	94	85
Average number of MA plans open to all beneficiaries in a county	5	12	20	35	34	21

Note: MA (Medicare Advantage), CCP (coordinated care plan), PPO (preferred provider organization), N/A (not applicable), PFFS (private fee-for-service). These figures exclude special needs plans and employer-only plans. A zero-premium plan with Part D includes Part D coverage and has no premium beyond the Part B premium. Regional PPOs were created in 2006. Part D began in 2006.

*Statistics for medical savings account plans (MSAs) are not shown. Only one MSA plan is offered in 2010 (and only in Pennsylvania). In 2009 there were only about 3,500 MSA enrollees nationwide.

Source: MedPAC analysis of plan bids to CMS, 2009.

of low-enrollment plans (CMS found a large number of plans with fewer than 10 enrollees) and duplicative plans (Centers for Medicare & Medicaid Services 2009b). CMS defined a duplicative plan as one that did not offer meaningful differences from other plan choices. Usually, such plans belonged to a family of plans from the same insurer with small differences among the benefit packages.

The second reason for the decrease involves the effects of provisions in the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA). One MIPPA provision was designed to prohibit non-network PFFS plans in certain types of areas. Although an average of 13 PFFS plans remain available in each county in 2010, there are fewer plans than in 2009. MIPPA requires that, by 2011, PFFS plans develop provider networks in areas where there are two or more CCPs. Some PFFS withdrawals—particularly by certain organizations—may have occurred in anticipation of this deadline.² PFFS plans, because they have not needed networks thus far, have been able to enter many markets and grow very rapidly. In 2009, PFFS enrollment was about 22 percent of MA enrollment. PFFS plans can also withdraw from markets rapidly. Plan bids project that PFFS enrollment will fall to about 17 percent of MA enrollment in 2010. Even when PFFS was growing rapidly, there was a substantial rate of voluntary disenrollment by beneficiaries. The Government Accountability Office (GAO) found that in 2007 the voluntary disenrollment rate for PFFS plans was 21 percent, much higher than the rate for other plan types, which averaged 9 percent voluntary disenrollment (Government Accountability Office 2008a). Because of the current round of PFFS plan withdrawals, many enrollees will need to either join a different MA plan in 2010 or obtain care through FFS. Most (99 percent) will have the opportunity to join a CCP. Some others will be able to join a different PFFS plan, and fewer than 400 enrollees will have no choice other than to obtain care through FFS Medicare. In comparison, only about 5 percent of CCP enrollees will need to switch plans in 2010, and all of them will have another plan available.

Payment to plans continues to exceed Medicare FFS spending for similar beneficiaries in 2010

Plan payment rates are determined by the MA plan “bid” (the dollar amount the plan estimates will cover the Part A and Part B benefit for a beneficiary of average health status) and the “benchmark” in the payment area (the maximum amount of Medicare payment set by law for an

MA plan to provide Part A and Part B benefits). If a plan’s bid is above the benchmark, the plan’s MA payment rate is equal to the benchmark, and enrollees have to pay an additional premium equal to the difference. If a plan’s bid is below the benchmark, the plan’s MA payment rate is its bid plus 75 percent of the difference between the plan’s bid and its benchmark. Because benchmarks are often set well above what it costs Medicare to provide benefits to similar beneficiaries in the FFS program, MA payment rates usually exceed FFS spending. In last year’s report, we examined why benchmarks are above FFS spending and what the ramifications are for the Medicare program (Medicare Payment Advisory Commission 2009a). (Actual plan payments, as opposed to payment rates, are risk adjusted. A more detailed description of the MA program payment system can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_MA.pdf.)

Benchmarks lower in 2010 than in 2009

When CMS calculated MA benchmarks for 2010, services subject to the Medicare sustainable growth rate (SGR), including physician services, were to be cut by 21 percent in 2010 according to then-current law. CMS estimated that the 21 percent reduction would result in a 4 percent decrease in overall FFS spending for 2010. The assumption of a 21 percent reduction due to the SGR was one of the factors that led to MA benchmarks in 2010 being about 0.5 percent lower than in 2009. The total change in benchmarks is the result of several payment factors:

- the overall expected growth in FFS spending, which reflects the 21 percent SGR cut;
- the phase-out of hold-harmless payments to plans (a decrease of approximately 0.8 percentage points);³ and
- the phase-out of the inclusion in MA rates of the payments made to teaching hospitals on behalf of MA beneficiaries for indirect medical education.

The overall 0.5 percent benchmark decrease varies slightly by county, depending on the percentage of a county’s FFS spending attributable to indirect medical education payments to teaching hospitals.

This decrease in benchmarks may well be temporary. Benchmarks will increase if, when CMS computes the 2011 benchmarks, FFS spending per capita has grown in 2010 and there is no large SGR cut in law for 2011. For example, if FFS per capita spending grew by 6 percent from 2009 to 2010 and there were no SGR cut in law for 2011, benchmarks for 2011 would grow by about 10 percent.

The average benchmark by plan type will vary depending on the counties the plans serve and where they draw their enrollment. By law, certain counties were given higher benchmarks with the intent to increase plan availability. Local PPOs and PFFS plans tend to operate in counties with higher benchmarks relative to FFS than other plan types. SNPs have high benchmarks relative to FFS because a large share of total SNP enrollment is in Puerto Rico, where benchmarks are very high relative to FFS (180 percent). (See the Commission's 2009 report for further discussion of Puerto Rico (Medicare Payment Advisory Commission 2009a).)

MA benchmarks, bids, and payments relative to Medicare FFS

Estimates of MA benchmarks, bids, and payments relative to Medicare FFS payments in 2010 hinge on a crucial assumption concerning the level of FFS expenditures in 2010. As discussed, when CMS made its calculation of projected FFS expenditures, services subject to the SGR, including physician services, were to be cut by 21 percent in 2010 according to then-current law. Once CMS publishes MA benchmarks each year (in April, for the following calendar year), the published benchmarks cannot be recomputed without specific legislation authorizing a new computation of benchmarks. If the Congress were to mandate that physicians be paid the same Medicare rates in 2010 as in 2009 (as is currently law for the first two months of 2010 (Department of Defense Appropriations Act of 2010)), the CMS actuaries suggest that their FFS spending estimates for 2010 would rise by about 4 percent. FFS payments would increase, but MA benchmarks, bids, and payment rates would not because they have already been determined based on the April 2009 announcement of MA rates. Therefore, any legislation forestalling SGR cuts in 2010 would cause a decrease in the estimates of the ratio of MA benchmarks, bids, and payments relative to FFS (compared with estimates under the original assumption of an SGR-based reduction).

Because of the magnitude of the baseline SGR reduction in 2010, we have calculated MA bids, benchmarks, and payments relative to FFS payments in two ways: first, accepting the initial CMS assumption of the full 21 percent cut in physician fee schedule payments (shown in Table 4-3a, p. 266); second, assuming no cut in physician fee schedule payment rates (i.e., physician fee schedule payment rates are the same in 2009 and 2010). The results following the latter assumption are shown in Table 4-3b (p. 266). Note that the results in Table 4-3b essentially reflect

a timing issue in that the 2010 benchmarks were set based on an assumed SGR reduction, but potential congressional action to restore payments would be occurring after benchmarks have already been set.

Following the first assumption—SGR cuts take effect for all of 2010—we estimate that, on average, 2010 MA benchmarks, bids, and payments would be 117 percent, 104 percent, and 113 percent of FFS spending, respectively (Table 4-3a). (Benchmarks, bids, and payments are weighted by plans' projected enrollment by county to estimate overall averages and averages by plan type.) Last year, we estimated that, for 2009, these figures would be 118 percent, 102 percent, and 114 percent, respectively.

Under the second assumption (Table 4-3b), that SGR cuts are postponed for 2010 and physician fee schedule payments remain the same as in 2009, all the MA-to-FFS comparisons would be lower. Bids as shown in Table 4-3b would be 100 percent of FFS for MA plans in aggregate. HMOs' bids in aggregate would be 97 percent of FFS, and PFFS plans' bids would be 111 percent of FFS. These bid ratios are similar to those we reported for 2009 when HMOs bid 98 percent of FFS and PFFS bid 113 percent of FFS. Because MA plans' bids reflect their expected costs, one could surmise that MA plans expect their costs to change more in line with the assumption of steady payments to physicians rather than a 21 percent cut in payments to physicians. If that is true, then their efficiency compared with FFS (as represented by their bids) would be similar to that for last year. (As discussed, in 2011, if the timing of the benchmark calculation allows it to accurately reflect FFS spending, the relative values will likely be similar to 2009 levels. For example, benchmarks were estimated to be 118 percent of FFS in 2009.)

In 2010, the ratio of payments to MA plans relative to FFS spending also varies by plan type, but the ratios for all plan types in both tables are substantially higher than 100 percent. In 2010, overall payments to plans average an estimated 113 percent of FFS spending in Table 4-3a or 109 percent of FFS in Table 4-3b. These payment ratios are lower than the 114 percent we estimated for 2009.⁴ In general, we attribute the slightly lower payment ratios to the combination of benchmarks growing slower than FFS growth and plans maintaining similar levels of efficiency (bidding) relative to FFS Medicare. Overall, payments to MA plans rose from \$93 billion in 2008 to \$110 billion in 2009, representing 26 percent of program spending in Medicare.

**TABLE
4-3****Payments exceed FFS spending for all plan types in 2010****Percent of FFS spending in 2010**

Plan type	Benchmarks	Bids	Payments
Table 4-3a: Data assuming SGR cuts occur			
All MA plans	117%	104%	113%
HMO	116	100	112
Local PPO	119	112	117
Regional PPO	113	109	112
PFFS	118	116	117
Restricted availability plans included in totals above			
SNP*	119	106	116
Employer groups*	117	112	115
Table 4-3b: Data assuming SGR cuts do not occur			
All MA plans	112%	100%	109%
HMO	112	97	108
Local PPO	115	108	113
Regional PPO	109	104	108
PFFS	114	111	113
Restricted availability plans included in totals above			
SNP*	115	102	111
Employer groups*	113	107	110

Note: FFS (fee-for-service), SGR (sustainable growth rate), MA (Medicare Advantage), PPO (preferred provider organization), PFFS (private fee-for-service), SNP (special needs plan). Benchmarks are the maximum Medicare program payments for MA plans. FFS spending by county is estimated using the 2010 MA rate book. Spending related to the double payment for indirect medical education payments made to teaching hospitals was removed. Totals may not sum due to rounding. *SNPs and employer-group plans have restricted availability and their enrollment is included in the statistics by plan type. They are presented separately to provide a more complete picture of the MA program.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and fee-for-service expenditures.

We separately analyzed bids and payments to SNPs and employer-group plans, because their bidding behavior differs from that of other plan types. Payments to SNPs are estimated to average well above FFS spending because the plans are located in areas that have high benchmarks relative to FFS. Notably, 87 percent of SNP enrollees are in HMOs, but the average SNP payment is higher than that of HMOs as a group because, in 2008, about 18 percent of all SNP enrollees lived in Puerto Rico, where benchmarks relative to FFS are high. (The text box provides additional information on SNPs.)

Employer-group plans consistently bid higher than plans that are open to all Medicare beneficiaries. In aggregate, employer-group plan bids and payments are well above FFS spending. The dynamic of the bidding process for employer-group plans is more complicated than for other

MA plans, because the employer-group plans can negotiate specific benefits and premiums with employers after the Medicare bidding process is complete. Conceptually, the closer the bid is to the benchmark—that is, the maximum Medicare payment—the better it is for the plans and the employer, because a higher bid brings in more revenue from Medicare, potentially offsetting expenses that would have required a higher pay-in from employers.

An additional factor to consider: Risk scores reflect coding intensity

An additional factor that should be taken into account is coding intensity. Actual payments to MA plans are risk adjusted using relative factors based on expenditures in the FFS program. Because plans are paid on a risk-adjusted basis, they have a financial incentive to make sure the providers that serve their enrollees report all diagnoses

The current status of special needs plans in Medicare Advantage

The Congress created a new Medicare Advantage (MA) plan type known as a special needs plan (SNP) in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to provide a common framework for existing plans (in particular those operating under demonstration authority) for special needs beneficiaries and to expand beneficiaries' access to and choice among MA plans. Targeted populations include dual (Medicare and Medicaid) eligibles, the institutionalized, and beneficiaries with severe or disabling chronic conditions. SNPs function essentially like (and are paid the same as) any other MA plan but they must be coordinated care plans (HMOs or preferred provider organizations) and they must provide the Medicare Part D drug benefit. Unlike other MA plans, however, they must limit their enrollment to their targeted populations.

In its March 2008 report, the Commission addressed issues with SNP plans and made seven recommendations (Medicare Payment Advisory Commission 2008). Most of the recommendations were implemented by CMS or enacted into law through the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA). Among the changes that have been made to the SNP program that reflect the Commission recommendations are:

- development of additional performance standards that apply to SNPs;

- improved information about SNPs being made available to beneficiaries;
- development of a clearer, more appropriate definition of the chronic conditions appropriate for the SNP model;
- a requirement that new dual-eligible SNP plans enter into contracts with states to coordinate Medicare and Medicaid coverage;
- a moratorium in 2010 on designating plans as SNPs that serve a disproportionate share of special needs individuals (as opposed to exclusively serving such individuals); and
- extending through 2011 SNP authority to limit enrollment to specific populations.

Rules that allow for continuous open enrollment and disenrollment of dual eligibles and special enrollment rules applying to other SNP types remain in place, although the Commission recommended altering the provisions to limit enrollment opportunities.

MIPPA also required that Medicare cost sharing for dual eligibles in SNPs be limited to the levels allowed by the state Medicaid program, a requirement that CMS extended to dual eligibles in all MA plans through regulations. ■

and other information that can increase their enrollees' risk scores. This more complete coding can inflate the risk scores of beneficiaries in MA plans relative to similar beneficiaries in FFS, whose providers in some cases lack a financial incentive to code so completely. CMS has recognized this phenomenon and, in its rate announcement for 2010, reduced reported risk scores by 3.41 percent (Centers for Medicare & Medicaid Services 2009a). Future reductions may be taken as well if risk score inflation continues.

Table 4-3 assumes an average risk score of 1.0 for all MA plans and for FFS—essentially assuming the CMS adjustment is accurate. Possible uncorrected inflation in

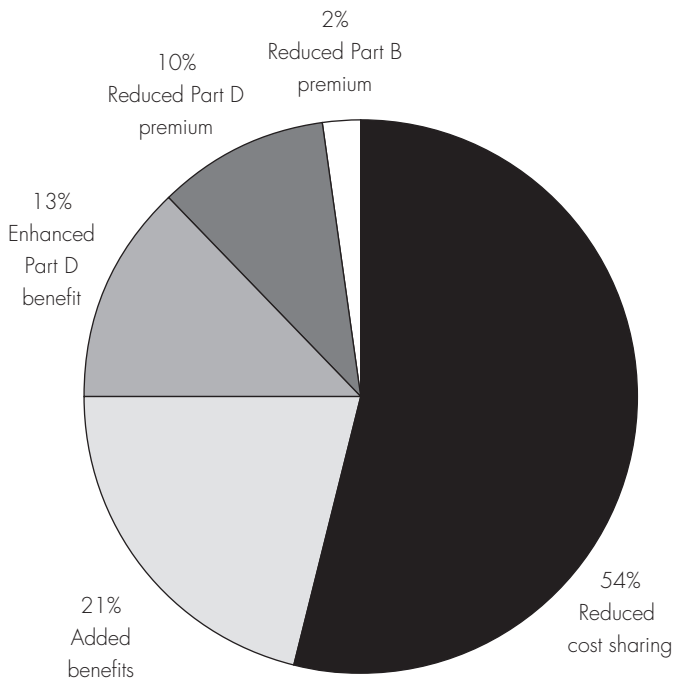
plans' risk scores resulting from increased coding intensity would tend to increase actual MA payments above the levels shown in Table 4-3. Similar to last year, the actual difference between MA payments and FFS spending in 2010 will vary from the estimate because of the eventual enrollment distribution by geography and type of plan and actual FFS spending levels.

Enhanced benefits are common but costly for Medicare

Enhanced benefits—benefits beyond those provided under traditional FFS Medicare—are built into the MA program payment system. As described above, when a plan bids below the payment area benchmark, Medicare pays the

**FIGURE
4-2**

Majority of rebate dollars finance reduced cost sharing for Medicare Part A and Part B benefits in Medicare Advantage plans in 2010



Note: Distribution of dollar amount of benefit enhancements financed by rebate dollars, weighted by projected enrollment in 2010. Part B-only plans excluded.

Source: MedPAC analysis of CMS plan bids for 2010.

plan 75 percent of the difference between the bid and the benchmark, with both the bid and benchmark adjusted for the health status of the plan's projected enrollees. The plan must use this amount (the "rebate" dollars) to fund benefit enhancements for its enrollees.⁵ The remaining 25 percent is retained by the Medicare program. (For example, if a payment area's benchmark is 110 percent of FFS and a plan serving the area bids 100 percent of FFS, 7.5 percentage points of the difference would be used to fund benefit enhancements and 2.5 percentage points would be retained by Medicare, yielding a payment to the plan of 107.5 percent of FFS.) Benefit enhancements that are allowed by statute are:

- reduction of cost sharing for Medicare Part A and Part B services;
- provision of added, non-Medicare benefits, such as routine dental and vision care;

- enhancement of the drug benefit in an MA–Prescription Drug (MA–PD) plan;
- reduction of the Part D premium in an MA–PD plan; and
- reduction of the Part B premium.

By far, the most common benefit enhancement by dollar value is the reduction of cost sharing for Medicare Part A and Part B services—that is, lower out-of-pocket spending at the point of service or lower premiums (in lieu of cost sharing at the point of service) charged for Medicare cost sharing (Figure 4-2). This use of rebate dollars constitutes 54 percent of the total rebate dollars across all plans. The reduction of cost sharing has traditionally been a benefit that Medicare private plans have offered to make plan enrollment attractive compared with the level of cost sharing in FFS Medicare. In 2010, the enrollment-weighted average level of rebate dollars applied toward cost sharing across all MA plans is projected to be \$38, compared with the \$132 figure that CMS projects is the actuarial value of cost sharing in FFS Medicare for Part A and Part B benefits (Centers for Medicare & Medicaid Services 2009a).⁶ While most beneficiaries in FFS have supplemental coverage that can cover all or some of their cost sharing (Medicaid, employer retiree coverage, and individually purchased medigap coverage), about 9 percent of Medicare beneficiaries in FFS do not have any supplemental coverage (Medicare Payment Advisory Commission 2009c). Such beneficiaries can obtain partial coverage of their Medicare cost sharing through an MA plan.

A plan's bid has three components: medical expenses (estimated costs of providing Medicare Part A and Part B services to the expected enrollee population), various administrative costs, and the plan margin (profit or loss).⁷ The last two components—administrative costs and the plan margin—together are referred to as the "load" or loading factor. Across all MA plans for 2010, the enrollment-weighted average loading factor accounts for an estimated 13 percent of the bid. A "fully loaded" cost includes all three bid components. Thus, on average, medical expenses are an estimated 87 percent of the bid. (The 2010 loading factor estimate could be understated. GAO found that, in 2006, actual profits among MA plans were 6.6 percent and nonmedical expenses were 10.1 percent, for a load totaling 16.7 percent. At the time of the bid submissions for 2006, the load was projected to be 13.1 percent. A similar result was found for 2005 projected and actual profits and nonmedical expenses (Government Accountability Office 2008b).)

**TABLE
4-4****Enhanced benefits and Medicare subsidy differ by plan type, 2010**

Plan type	Payment above FFS (per member per month)	Enhanced benefit (per member per month)		Medicare subsidy per dollar of enhanced benefits
		Benefit plus load	Benefit only	
All MA plans	\$68	\$70	\$63	\$1.08
HMO	62	91	82	0.76
Local PPO	83	37	34	2.44
Regional PPO	72	32	30	2.40
PFFS	80	20	18	4.44

Note: FFS (fee-for-service), MA (Medicare Advantage), PPO (preferred provider organization), PFFS (private fee-for-service). Load is the sum of projected administrative costs and profits from plan bids. Medicare subsidy is the payment above FFS divided by benefit. The “benefit-only” column slightly overstates the net value because the load is included in the Part D load when the benefit enhancement is a drug benefit enhancement. Data exclude Part B-only (fewer than 8,000 enrollees). Projections assume physician fee schedule rates in fee-for-service Medicare are not reduced in 2010.

Source: MedPAC analysis of data from CMS on plan bids, enrollment, benchmarks, and fee-for-service expenditures.

When a plan’s bid requires the addition of enhanced benefits, such benefits have a load factor applied. The load factor is the same for the reduction of Medicare Part A and Part B cost sharing and for the added, non-Medicare benefits as it is for Part A and Part B medical expenses in the bid. For the reduction in the Part B premium, no load factor applies. In the case of Part D benefits—premium reduction or benefit enhancement—a load factor is a component of the Part D bid, not the Part A and Part B bid.

Table 4-4 shows the cost to the Medicare program of MA benefit enhancements assuming there is no SGR reduction to the physician fee schedule in 2010. (This assumption is incorporated in Table 4-3b, p. 266.) On average, all plan types are receiving total payments that exceed Medicare FFS expenditure levels, as shown in the first column of numbers of Table 4-4. Average payment to MA plans overall is \$68 per member per month (PMPM) more than Medicare FFS, all of which is used to finance enhanced benefits through rebate levels averaging \$70 PMPM (benefits plus load). The amount spent on enhanced benefits varies by plan type. HMOs have the highest rebate levels, at \$91 PMPM (benefit plus load)—more than four times the \$20 PMPM for PFFS plans. Adjusting for the average loading factor (subtracting the average amount of administrative costs and margin associated with the enhanced benefits) reduces the all-plan \$70 PMPM average to \$63 PMPM. The \$63 amount is the estimated value of the enhanced benefits the average enrollee will receive in 2010.⁸

The last column in Table 4-4 shows payment above FFS divided by the value of the enhanced benefit; this value represents the Medicare subsidy per dollar of enhanced benefit—\$1.08 for all plans. In the case of HMOs, shown in the second row, because their bids for the Medicare benefit package are below Medicare FFS spending, the program subsidy is 76 cents for each \$1.00 of enhanced benefits. In the case of PFFS plans, on average, the program subsidy is \$4.44 for each dollar of enhanced benefits. In other words, HMOs are the only MA plan type that finances any part of enhanced benefits through plan efficiencies: 24 cents of every dollar. Enhanced benefits in other plan types are completely subsidized by Medicare. CMS estimates that the subsidy and the added program costs for Part B benefits in MA result in an increase of \$3.35 in the Part B premium that all beneficiaries pay.

Quality trends remained stable

Each year we examine the level of, and trends in, the quality of care for beneficiaries enrolled in MA plans using the data that health plans or CMS collects and reports. Little changed between 2008 and 2009 with respect to quality measures, but there were several instances of positive performance. For example, the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey results for MA enrollees, discussed below, showed that Medicare beneficiaries reported high satisfaction with their plans and the care they received. Also, CMS gave two new HMOs top ratings in overall plan quality based on a composite of performance on clinical and patient experience measures

and administrative standards. Achieving a high rating is atypical for newer plans, which tend to score lower on quality measures than established plans. Finally, most MA beneficiaries continue to be enrolled in plans with better performance on quality indicators relative to other plans.

The data sources the Commission used to make its assessment, which are described in greater detail in past reports (Medicare Payment Advisory Commission 2008, Medicare Payment Advisory Commission 2009b) and in Chapter 6 of this report (the MIPPA-mandated report on comparing quality in MA and FFS Medicare), include:

- the clinical process and intermediate outcome measures that comprise the Healthcare Effectiveness Data and Information Set (HEDIS[®]), which health plans report to CMS;⁹
- measures that reflect beneficiary experience of care from the MA CAHPS survey;
- outcome results from the Health Outcomes Survey (HOS) administered to MA enrollees through their health plans; and
- the CMS star rating system, which is a combination of results from the three preceding sources, along with CMS data on customer service (some of which are based on plan reports through HEDIS), plan performance on appeals, plan disenrollment rates, and plans' operational and regulatory compliance status.

Overall change in level of quality indicators in 2009

For 2009, the MA program showed slight improvement in quality indicators over the preceding year. As a class, cost-reimbursed HMOs had the best performance among plan types, with higher average scores on clinical quality indicators for 2009 and high performance in CMS's overall rating system in 2009.¹⁰ Among plan types, regional PPOs and PFFS plans continued to be the poorest performing plans on quality measures—except for flu and pneumonia vaccination rates among their enrollees. It continued to be the case that newer plans generally had lower scores on quality measures than more established plans, with some notable exceptions. For example, three MA HMO plans had five-star ratings in overall health plan quality in CMS's star rating system this year compared with none last year. Two of the three were newer plans that began their Medicare contracts in 2006; the other was a plan that had participated in Medicare since 1983. A caveat is that certain changes in the CMS star rating

system do not make the results entirely comparable between this year (2009) and last year (2008), the first year of CMS's star rating system.

HEDIS results

HEDIS is a product of the National Committee for Quality Assurance (NCQA), which reports on health plan results annually. The organization's most recent report was issued in October 2009, reporting on health plan results for care rendered in 2008 (National Committee for Quality Assurance 2009). NCQA reported that 2008 was the third consecutive year in which the performance of Medicare health plans was "flat" in relation to the preceding year. Unlike in past years, commercial health plans also showed similar performance in the 2009 report, as did Medicaid plans. For Medicare, NCQA reported that 7 of the 46 Medicare "effectiveness of care" measures showed statistically significant improvement between the 2008 and 2009 reports, and one measure showed a statistically significant decline (but it is a measure that CMS has stopped using in its star rating system, as we discuss in Chapter 6 of this report).

For the 38 remaining HEDIS measures that Medicare plans report, 4 measures are currently at relatively high levels, making significant improvement less likely: lipid profiles and blood glucose monitoring for diabetics and cholesterol screening for patients with cardiovascular conditions have rates exceeding 86 percent—as does the overall measure for monitoring persistent medications. Two additional measures for which low HEDIS scores indicate better performance also would appear to be less susceptible to improvement: one of three drug–disease interaction measures for the elderly (the use of certain drugs by enrollees with renal disease) and one of two measures of the use of high-risk drugs among the elderly. The averages for the remaining 32 measures range from 4.3 percent (engagement in alcohol and drug abuse treatment) to 74.1 percent (prescriptions for bronchodilator)—among 26 measures for which higher rates are better—and range from 16.2 percent (drug–disease interaction, enrollee with accidental fall or hip fracture, and use of certain drugs) to 29.5 percent (poor blood glucose control among diabetics) for the 6 measures for which lower HEDIS rates indicate better performance.

When making its overall statement about health care quality in MA plans, NCQA computes its results by taking a simple average of the HEDIS measures across all MA HMO plans (only HMOs are included and all HMO plans are weighted equally, not by enrollment).

PPOs are reported on separately because of the different reporting standards that apply to such plans, which we discuss in greater detail in Chapter 6 of this report. The main difference between HMO and PPO reporting is that CMS currently does not allow PPOs to use medical record review as a component in determining their HEDIS results for the so-called “hybrid” measures, while HMOs can use medical record review in determining their rates for such measures.¹¹ Beginning in 2010, CMS will allow PPOs to use medical record data in reporting HEDIS results for hybrid measures (Centers for Medicare & Medicaid Services 2009c).

NCQA does not currently report results for PFFS plans. PFFS plans will be required to report HEDIS results in 2011 (for care rendered in 2010); however, many PFFS plans report HEDIS results on a voluntary basis already. Unlike HMOs and PPOs, the PFFS HEDIS data are not necessarily audited by NCQA-certified auditors.

New, smaller plans affect averages In the March 2009 report, we noted a number of caveats pertaining to the reporting of HEDIS measures on the basis of plan averages. One caveat is that many plans in the 2009 data are new, and newer plans tend to have lower performance on many measures. Of the 267 Medicare HMO plans reporting in the 2009 HEDIS data, 45 plans did not participate in HEDIS 2008 reporting. The 45 newly reporting plans are very small, with a total enrollment of 134,000 in 2008, or an average of about 3,000 members. Such small enrollment prevents plans from reporting certain measures. The reporting rate among these plans for 31 of 46 HEDIS measures is 60 percent or less.¹² For the 15 remaining measures, it is more than 90 percent. In addition, eight plans that reported in 2008 did not do so in 2009. Thus, the set of plans reporting in the two years is not exactly the same, and results for the two reporting years are therefore not entirely comparable.

One way to control for the exit and entry of large numbers of plans from year to year, and for the learning curve of new plans in reporting HEDIS results, is to examine a cohort of plans that have reported a value in each of the two measurement years (HEDIS reporting years 2008 and 2009, in this case). This approach yields a slightly different result from one that compares the simple average of all plans in 2008 with that of all plans in 2009 (Table 4-5, p. 272). Of the 46 HEDIS measures, the all-plan approach shows a statistically significant improvement in 7 measures, while the cohort approach shows an improvement in 9 measures.

Variation across plans in HEDIS measures As in prior years, our analysis of the HEDIS public use files released by CMS shows great variation among plans in HEDIS scores for individual measures, even among established plans (those that have served as Medicare managed care plans since before 2004). Table 4-6 (p. 273), which shows the HEDIS results for the percentage of MA HMO enrollees with diabetes who received an eye exam, illustrates the variability in scores.

Table 4-6 also shows that the number of HMO plans is now nearly evenly divided between established plans and plans that began participating in MA in 2004 or more recently. In contrast, the number of enrollees in more established plans is greater than in newer plans by a six-to-one ratio. To the extent that the main concern about the state of quality in MA is how well beneficiaries are faring in MA plans, the dominant position of established plans in terms of enrollment (at least in this category of plan type—HMOs) means that most enrollees are in the higher performing plans.

About 10 percent of CCP enrollment is in local PPOs. The performance of these plans in HEDIS is similar to that of HMOs on most measures that can be compared between the two plan types (i.e., the 33 administrative-only HEDIS measures that do not involve medical record review). For nine measures, there are statistically significant differences between the two plan types. Averages for local PPOs are better than HMO averages for seven measures (engagement in alcohol and drug abuse treatment, use of disease-modifying antirheumatic drugs (DMARD therapy) for rheumatoid arthritis, three measures of drug monitoring, and a measure of osteoporosis testing among older women). HMOs have better average scores in managing osteoporosis for women with a fracture and managing the risk of falling. We have noted in the past that the PPO scores may be higher than HMO scores because PPOs may have better administrative record systems as claims-based operations with fewer capitated arrangements with physicians. We have also noted that at least half of the local PPOs in MA are operated by plans that have HMOs in the same market area.

The Consumer Assessment of Healthcare Providers and Systems

CAHPS is a survey instrument that provides information on respondents’ experiences with their health plan and their providers. CAHPS was developed by the Agency for Healthcare Research and Quality (AHRQ). For MA, the

**TABLE
4-5****Medicare Advantage HEDIS® measures with statistically significant changes from 2008 to 2009**

HEDIS® measure	Type of averaging approach		All plan average rate, 2009
	All plan	Cohort	
Measures that improved			
Diabetes care:			
Medical attention for nephropathy	✓	✓	87.8%
<100 LDL-C level		✓	48.6
Control of blood pressure among hypertensives		✓	58.5
Colorectal cancer screening rate	✓	✓	53.0
Fall risk management:			
Discussion (from Health Outcomes Survey)	✓		31.3
Management (from Health Outcomes Survey)	✓		57.8
Monitoring of persistent medications:			
Digoxin	✓	✓	90.4
Diuretics	✓	✓	87.1
ACE inhibitors or ARBs		✓	86.7
Anticonvulsants		✓	67.5
Persistence of beta blocker use after a heart attack*	✓	✓	79.7
Measure that declined			
Initiation of alcohol or drug addiction treatment*	✓	✓	45.8

Note: HEDIS® (Healthcare Effectiveness Data and Information Set), LDL-C (low-density lipoprotein cholesterol), ACE (angiotensin-converting enzyme), ARB (angiotensin receptor blocker). All-plan average rates are the 2009 levels for the measures (e.g., the percent of diabetics receiving medical attention for nephropathy—either a screening test or evidence of nephropathy being treated). All-plan averaging includes results for any HMO plan reporting in either year. Cohort averaging uses only results from plans reporting in both the 2008 and 2009 reporting period. Statistical significance determined by two-tailed t-test ($p \leq 0.05$).

*CMS does not use these measures in its star rating system because they apply to so few enrollees.

Source: MedPAC analysis of CMS HEDIS® data.

CAHPS survey consists of questions aggregated into the following six domains:

- how well doctors communicate
- getting care quickly
- getting needed care without delays
- health plan information and customer service
- overall rating of health care quality
- overall rating of health plan quality

For each of these domains, the 2009 CAHPS results showed little or no change from 2008 results. Medicare plan results were generally equal to or better than commercial (adult) plan results. For example, in both 2008 and 2009, 90 percent of MA plan enrollees surveyed said they “usually” or “always” got needed care, compared

with 86 percent among commercial plan enrollees. On “how well doctors communicate,” the result for MA enrollees reporting in both years was “usually” or “always” 94 percent of the time, which was the same rate for commercial plan adult enrollees in 2009. MA enrollees rated their plans higher overall than commercial enrollees. In both 2008 and 2009, 59 percent of MA enrollees gave their plan a rating of 9 or 10, compared with 36 percent and 38 percent of the adult commercial enrollees in the respective years (Agency for Healthcare Research and Quality 2009).

CAHPS is the source of the MA HEDIS measure for flu vaccinations for enrollees age 65 and over, and pneumonia vaccination rates (enrollees age 65 and over who report ever having been vaccinated for pneumonia) for the 2008–2009 period (Table 4-7). The Medicare.gov website reports these rates for FFS Medicare as well as for plans. There is wide variation in the rates of vaccination across

geographic areas in FFS and wide variation across plans and plan types.¹³ Unlike their performance on other quality indicators, some PFFS plans had high rates of immunization among their enrollees that were comparable to rates in coordinated care plans.

Health Outcomes Survey

The HOS is a longitudinal survey of self-reported health status among MA enrollees over a two-year period. For each plan in the MA program, a randomly selected sample of enrollees is surveyed in a given year and are resurveyed two years later to measure changes in physical and mental health. Two-year-change scores are calculated and beneficiaries' physical and mental health status is categorized as better, the same, or worse than expected based on a predictive model, taking into account risk-adjustment factors and death. When results are reported, a plan is deemed to have better or poorer outcomes if the plan's results on the physical or mental health measures are significantly different from the national average across all plans.

The most recent HOS results for the 2006–2008 cohort show that no plans were classified as outliers in physical health status changes for their enrollees—that is, the physical health status changes were within expected ranges and not significantly different from the average across all plans. For mental health, 2 of the 187 reporting plans showed better-than-expected mental health outcomes and 10 showed worse-than-expected mental health outcomes.

HOS results are posted at the Medicare.gov website in a different format than on the HOS website. The

**TABLE
4–6**

Rates of eye exams for diabetics in Medicare HMOs, 2009

	Established HMO plans	New HMO plans
Rate of eye exams for diabetics, HEDIS®		
Average	67%	54%*
Median	67	54
Minimum	36	9
Maximum	89	89
Number of plans		
Reporting this measure	143	133
Not reporting this measure	2	3
Enrollment**	5,876,640	930,136
Average enrollment per plan	53,141	5,140

Note: HEDIS® (Healthcare Effectiveness Data and Information Set). Established HMOs are plans beginning Medicare operations in 2003 or earlier; new HMOs are plans beginning as Medicare contractors in 2004 or later.
*Statistically significant difference ($p < 0.01$).
**Data as of mid-2009.

Source: MedPAC analysis of CMS HEDIS® data.

Medicare.gov Medicare Options Compare website presents the HOS results as a star rating and as the percentage of beneficiaries reporting maintained or improved health. At this site, across 176 plans, HOS results ranged from 57 percent to 73 percent of plan enrollees reporting maintenance or improvement of physical health. Although a CMS-sponsored analysis of

**TABLE
4–7**

Ranges of vaccine rates by MA plan type

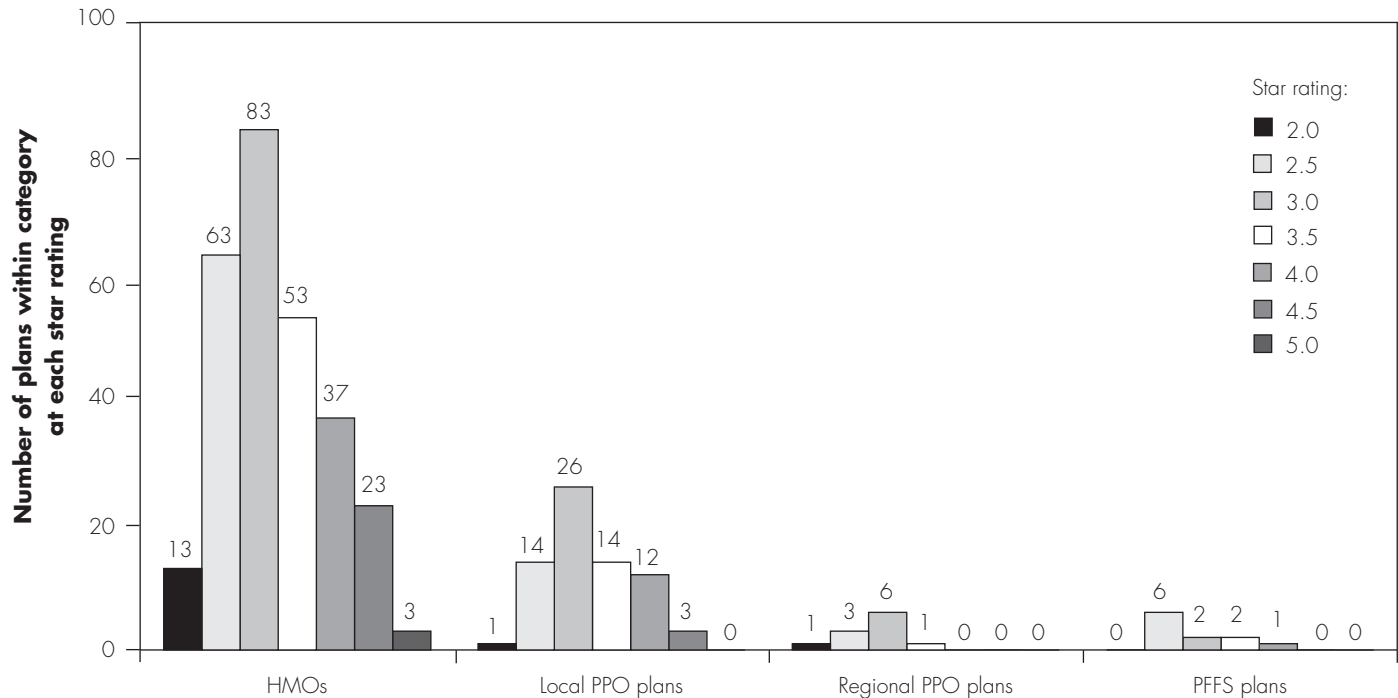
Plan type	Flu		Pneumonia	
	Minimum	Maximum	Minimum	Maximum
MA plans				
Cost-reimbursed HMOs	73%	87%	73%	92%
Other HMOs	23	88	13	88
Local PPOs	20	79	16	80
Regional PPOs	57	77	58	79
PFFS	53	83	51	79

Note: MA (Medicare Advantage), FFS (fee-for-service), PPO (preferred provider organization), PFFS (private fee-for-service). Rates are given at the plan contract level for MA and by geographic area in Medicare FFS.

Source: MedPAC analysis of CMS downloadable medicare.gov data for Medicare Options Compare.

**FIGURE
4-3**

About 40 percent of HMO and local PPO plans have high star ratings for overall plan quality as of 2009



Note: PPO (preferred provider organization), PFFS (private fee-for-service).

Source: MedPAC analysis of CMS star ratings for overall plan quality.

HOS results showed no statistically significant difference among plans at the 95 percent confidence level for enrollees' physical health changes, the Medicare.gov website distinguishes two levels of performance in the physical health category. All but four plans received a 4-star rating for "improving or maintaining physical health." The four plans in the lower range—those with only 57 percent to 59 percent of their enrollees reporting improved or maintained physical health—received a 3-star rating in this category.

CMS star ratings for overall plan quality

In 2008, CMS instituted a star rating system for MA plans and stand-alone drug plans. One category of stars is for "overall health plan quality," which in 2008 was composed of measures or results from HEDIS, CAHPS, and HOS and appeals information from an independent review entity. Because of two changes in the rating system, this year's overall star ratings are not directly comparable to the star ratings given to plans last year. First, the components of the star rating system were expanded for the 2010 open enrollment period to include information about complaints

that CMS tracks and CMS-required corrective action plans. Second, a subset of HEDIS measures is used to determine the star ratings, and CMS has removed from the star rating system several HEDIS measures owing to small numbers and the consequent lack of statistical reliability (as we discuss in Chapter 6). The measures previously used but no longer included are depression medication management, mental illness measures, and persistence of beta blocker use after a heart attack.

CMS assigns star ratings in each of the subdomains of the larger "overall plan quality" category through algorithms comparing performance across plans. Plans are not necessarily penalized for not being able to report particular measures. Within each subdomain a tolerance level is set for the number of measures that can be absent but that will still permit the plan to be assigned a star rating for the subdomain. CMS also takes sustained good performance over time into account. The subdomains have the following descriptive labels in the Medicare Options Compare data:

- staying healthy: screenings, tests, and vaccines;

**TABLE
4-8**

Among the three plans with 5-star ratings in overall quality for 2009, two have many individual components of quality that are unrated

Components by plan	Star ratings for individual components				
	Components with 5 stars	Components with fewer than 5 stars	Percent of rated components at 5 stars	Number of unrated components	Percent of components with no rating
Individual clinical quality of care and outcome components (19 measures)					
Plan A	9	8	53%	2	11%
Plan B	6	4	60	9	47
Plan C	2	5	29	12	63
Adding the 14 nonclinical components (33 cumulative total measures)					
Plan A	18	12	60	3	9
Plan B	17	4	81	12	36
Plan C	11	8	58	14	42

Note: Plans can receive a maximum of 5 stars for each component of the overall rating. The maximum overall rating is 5 stars, consisting of an average of each component, with some adjustments by CMS.

Source: MedPAC analysis of CMS star rating data.

- managing chronic (long term) conditions;
- ratings of health plan responsiveness and care;
- health plan members' complaints, appeals, and choosing to leave the health plan; and
- health plans' telephone customer service.

As indicated by the labels for each subdomain, the overall plan quality star rating is not exclusively a rating of clinical quality but includes patient experience measures, customer service results, and level of adherence to regulatory requirements. We illustrate this point below in discussing the three plans with the highest overall quality star ratings.

The star ratings for 2009 range from 2 to 5 (on a 0 to 5 scale), with 3 plans—all of them HMOs—having an overall quality star rating of 5. In addition, a little more than 40 percent of HMO plans—constituting about half of the MA HMO enrollment—had ratings of 3.5 stars or higher (Figure 4-3, enrollment distribution not shown). A similar situation held for local PPO plans (41 percent of plans with 47 percent of local PPO enrollment were at 3.5 or above).

As in past years, cost-reimbursed HMO plans as a class had the best results on quality indicators, as indicated by

their star ratings for the current year (all 280,000 enrollees of rated plans in this class were in plans with star ratings of 3.5 or higher (not shown in Figure 4-3)). PFFS plans and regional PPOs had the poorest results in the CMS star ratings. One of 11 rated regional PPOs had a rating of 3.5 stars (and none was higher), with 9 percent of regional PPO enrollment. One PFFS plan had a 4-star rating (2 percent of enrollment), 2 were 3.5-star plans (2 percent of enrollment), and 2 were 3-star plans (1 percent of enrollment). The 6 PFFS plans with a 2.5-star rating in overall quality included 95 percent of the PFFS enrollment in rated plans. PFFS plans also had the largest proportion of enrollees in plans that were either too new to be rated or had insufficient data for a star rating—45 percent of PFFS enrollees as of late 2009 were in such plans (compared with 8 percent among local PPOs and about 1 percent among HMOs and regional PPO plans; data not in figure). Thirty PFFS plans were classified as not having enough data for an overall quality score, which in part reflects the small number of plans reporting HEDIS data on a voluntary basis and the consequent inability of CMS to determine an overall quality score because of the absence of HEDIS data.

How the final star rating is determined can be illustrated with the example of the three plans that in 2009 had a 5-star rating for overall plan quality (Table 4-8). The

overall rating is composed of several quality measures, each of which is rated. The clinical quality components that make up the rating system include measures that CMS designates as “screening, tests, and vaccines” (12 measures, such as HEDIS screening measures) and “managing chronic conditions” (7 measures, such as HEDIS measures of care for diabetics). The three highly rated plans did not report, or were not required to report, certain measures. One plan was primarily at the 5-star level because of its good performance in nonclinical components, such as responsiveness to member

complaints and CAHPS ratings of care. That plan (shown as Plan C in Table 4-8) received a 5-star rating for only 2 of 19 clinical quality measures, had fewer stars for 5 measures, and had no rating for 12 measures. In contrast, the plan received a 5-star rating for 9 nonclinical measures. For the cumulative total of clinical and nonclinical measures, the plan received 5 stars for slightly more than half its ratings (58 percent) and no rating for a substantial proportion (42 percent) of the star system’s measures, either because of insufficient data or because the plan was not required to report the measure. ■

Endnotes

- 1 We define urban counties as those in a metropolitan statistical area; all other counties we classify as rural. To match more closely the designation of nonfloor and floor counties (including the urban floor), we use the metropolitan statistical area status of counties as of 2002, before changes in the designation of counties in 2003.
- 2 Mike McCallister, chief executive officer of Humana as quoted in the *Wall Street Journal*: “For example, we got very big very fast in a product called private fee-for-service in Medicare Advantage. We knew it would be the first product to come under pressure, because it was more of an insurance approach than a management approach. So ... we also began the process of building networks across the U.S. And sure enough, on Jan. 1, 2011, private fee-for-service as we know it by and large will disappear. Second stick in the ground, we realized we won’t be paid above-Medicare rates forever, so how do we make the business work if that’s the case? At the end of the day we have to be able to deliver services to these seniors at 15% under the traditional Medicare program.” (*Wall Street Journal* 2009).
- 3 The hold-harmless payments are required by the Deficit Reduction Act of 2005 as a phase-out of extra payments made to plans to compensate for lower payments under the current risk-adjustment system. The hold-harmless payments added 0.9 percent to benchmarks in 2009 and 0.1 percent in 2010. After 2010, the hold-harmless payments will be eliminated.
- 4 There is some interaction between FFS and MA that can affect the comparisons. The MA program can reduce expenditures in the Part D program. Since bids for both stand-alone prescription drug plans and MA drug plan bids make up the overall national average Part D bid and affect Medicare’s payments to drug plan sponsors, lower average bids by MA plans somewhat reduce federal program spending for Part D. There can also be interaction between the two sectors in the form of spillover. For example, many physicians care for both MA enrollees and beneficiaries in traditional FFS. Physicians who practice in a managed care setting as well as in FFS Medicare may adopt more efficient practices as plan providers and could use the same practices in providing care to FFS enrollees, potentially reducing FFS costs (see discussion in Chapter 6).
- 5 A plan can also choose to offer benefits beyond the traditional Medicare benefit package funded by beneficiary premiums. The discussion of enhanced benefits in the text does not include premium-funded benefits.
- 6 The \$132 figure for FFS is for beneficiaries without end-stage renal disease, a very small proportion of whom are enrolled in MA plans. The figure given for cost-sharing reduction in MA plans is before adjustment for administration and profit. The MA figure is not strictly comparable to the FFS cost-sharing figure because the MA figure represents an actuarial value that is applied toward a plan’s cost of providing the Medicare Part A and Part B benefit, a cost that can be lower than FFS costs in a given area. The FFS figure is the national average actuarial value of cost sharing. However, the two figures are roughly comparable, and a comparison serves to indicate that MA enrollees do have reduced cost sharing in MA plans, but there is still cost sharing associated with the Part A and Part B benefit in MA.
- 7 A plan’s administrative costs include items such as member service activities, provider contracting, provider relations, medical management, quality improvement activities, information systems, claims processing, marketing, and other nonmedical costs. Administrative costs vary from plan to plan. PFFS plans are likely to have high administrative costs associated with claims processing but little if any costs associated with provider contracting. Generally, an HMO with salaried physicians that owns its own hospitals may have little in the way of claims processing costs, while a PPO has both claims processing and provider contracting costs. Plans that serve employer-group enrollees exclusively generally have much lower marketing costs than plans that enroll Medicare beneficiaries individually.
- 8 Because we do not take into account the loading factor for Part D benefits that is determined through the Part D bid, the \$63 net figure is slightly higher than if we had applied the Part D loading factor to the benefit enhancements of drug coverage. If the Part D loading factor is similar to the MA bid loading factor, the net value of enhanced benefits would be in the range of \$61 across all plans.
- 9 HEDIS reporting also includes measures that are collected through the two beneficiary surveys. HEDIS results for flu vaccination rates, pneumonia vaccines, and smoking cessation advice are from the CAHPS survey; HEDIS includes HOS results for fall risk management, osteoporosis testing, management of urinary incontinence, and advice on physical activity.
- 10 The discussion of quality in the Medicare health plan program includes cost-reimbursed plans authorized under section 1876 of the Social Security Act. The payment section of this chapter does not include section 1876 cost plans. All section 1876 cost plans are HMOs, as required by law. Such plans are paid the reasonable cost of providing services to their

Medicare enrollees, based on cost reports the plans submit. Quality requirements apply to cost plans and both NCQA and CMS track and report the performance of these plans.

- 11 Although a statutory provision permits Medicare PPOs to report only on the care rendered through network providers, CMS staff have indicated that PPOs report HEDIS measures for both in-network and out-of-network providers.
- 12 For example, only 1 of the 45 newly reporting HMO plans, with 33,000 enrollees, reports a result for the percentage of enrollees with persistent use of beta blockers after a heart attack. It is one of the measures for which NCQA found a statistically significant improvement in results for Medicare

plans between 2008 and 2009, but it is also one of the measures that CMS has stopped including in the plan star rating system because the measure applies to so few enrollees within a plan.

- 13 The flu and pneumonia vaccine rates are reported for FFS at the state level in CAHPS. Some states report at the substate level. For example, California and New York have rates reported for six areas. Eleven states show substate reporting in the Medicare.gov CAHPS data. The flu vaccination rates within the FFS geographic areas nationwide reported at Medicare.gov ranged from 29 percent to 77 percent; pneumonia vaccination rates ranged from 26 percent to 76 percent.

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C H A P T E R

5

Status report on Part D

Status report on Part D

Chapter summary

Part D of Medicare provides an outpatient prescription drug benefit through the use of competing private plans. To observe program performance, we examined several indicators of beneficiary access and program spending, discussed below.

Enrollment in Part D—All but about 4.5 million of 45 million Medicare beneficiaries have Part D drug coverage or its equivalent. In early 2009, about 59 percent of beneficiaries were enrolled in Part D plans, 31 percent had other sources of creditable coverage, and 10 percent had no drug coverage or coverage less generous than Part D. Among those in Part D plans, nearly 10 million low-income individuals (21 percent of all Medicare beneficiaries) received extra help with premiums and cost sharing through the low-income subsidy (LIS). Roughly two-thirds of Part D enrollees are in stand-alone prescription drug plans (PDPs); the rest are in Medicare Advantage–Prescription Drug plans (MA–PDs).

Benefit offerings for 2010—Sponsors are offering about 7 percent fewer PDPs than in 2009. About 10 percent fewer MA–PDs are available, reflecting a decline in the number of private fee-for-service plans and local health maintenance organizations. Beneficiaries will continue to have a choice of 41 to 55 PDP options, along with many MA–PDs. For 2010, sponsors are

In this chapter

- Part D enrollees’ access to prescription drug benefits
- Costs of Part D
- Measuring plan performance in Part D
- Policy issues

tightening benefit designs for PDPs with respect to deductibles and gap coverage while keeping largely the same benefit structure for MA-PDs.

Growth in Part D premiums—At the time of publication, Part D enrollees in 2010 are paying, on average, about \$30.50 per month, up less than \$2 (6 percent) from 2009. In 2010, the average PDP enrollee pays about \$37.70 per month, about \$2.60 more (7 percent) than in 2009. For the average MA enrollee, the portion of MA premiums attributable to drug benefits declined by about \$0.60 (4 percent) to \$14 per month.

Plans available at no premium to LIS enrollees—CMS sets a maximum amount in each region that Medicare will pay for extra help with premiums through the LIS. If a basic-benefit plan's premium falls below that threshold, LIS enrollees in that plan pay no premium. In 2010, about the same number of PDPs met this criterion as in 2009 (307), and each region has at least 4 such PDPs. CMS needed to reassign an estimated 1.06 million LIS enrollees to plans offered by a different sponsor because their previous plan's premium no longer fell below the 2010 LIS threshold—roughly the same number as in 2009.

Part D spending—In 2008 and 2009, Part D spending totaled \$49 billion and an estimated \$53 billion, respectively. In 2008, payments for premiums and cost-sharing assistance under the LIS were the largest component of Part D spending. In 2008 and 2009, Medicare's reinsurance payments for the highest spending enrollees were the fastest growing component of Part D, partly because of the difficulty of negotiating rebates for high-cost drugs and biologics that have few competing therapies.

Measuring quality in Part D—CMS publishes 19 performance metrics aggregated into a 5-star rating system through the Medicare Prescription Drug Plan Finder at www.medicare.gov. Two metrics address patient safety, and the rest focus on customer service and enrollee satisfaction. For 2010, CMS has set more requirements addressing how sponsors operate, monitor, and report on their plans' medication therapy management programs. ■

**TABLE
5-1****Parameters of the defined standard benefit increase over time**

	2006	2007	2008	2009	2010
Deductible	\$250.00	\$265.00	\$275.00	\$295.00	\$310.00
Initial coverage limit	2,250.00	2,400.00	2,510.00	2,700.00	2,830.00
Annual out-of-pocket spending threshold	3,600.00	3,850.00	4,050.00	4,350.00	4,550.00
Total covered drug spending at annual out-of-pocket threshold	5,100.00	5,451.25	5,726.25	6,153.75	6,440.00
Maximum amount of cost sharing in the coverage gap	2,850.00	3,051.25	3,216.25	3,453.75	3,610.00
Minimum cost sharing above annual out-of-pocket threshold:					
Copay for generic/preferred multisource drug prescription	2.00	2.15	2.25	2.40	2.50
Copay for other prescription drugs	5.00	5.35	5.60	6.00	6.30

Source: CMS, Office of the Actuary.

Each year since 2006, the Commission has provided a status report on Medicare's Part D prescription drug program. To monitor the ability of the program—under its competitive approach—to meet the Medicare goals of maintaining beneficiary access while holding down program spending, we examine several performance indicators: beneficiaries' access to prescription drugs, including among other things data on enrollment and changes in Part D plan benefit designs and formularies for 2010; program costs; and the quality of services.

Background

Medicare's payment system for Part D, which uses competing private plans to deliver drug benefits, is very different from its fee-for-service (FFS) payment systems. Instead of prices set administratively, as in FFS, Part D payments are based on bids submitted by plan sponsors.

Part D uses two avenues of competition designed to give plan sponsors an incentive to offer beneficiaries attractive prescription coverage while controlling growth in drug spending. First, private plans must compete for enrollees. Ideally, beneficiaries choose a plan that provides access to the medications they need at premiums and copays they are willing to pay, and they reevaluate that decision from time to time. In a second avenue of competition, sponsors may seek to gain market share by annually bidding below thresholds to qualify their plans to remain premium-free for most enrollees who receive Part D's low-income subsidy (LIS).

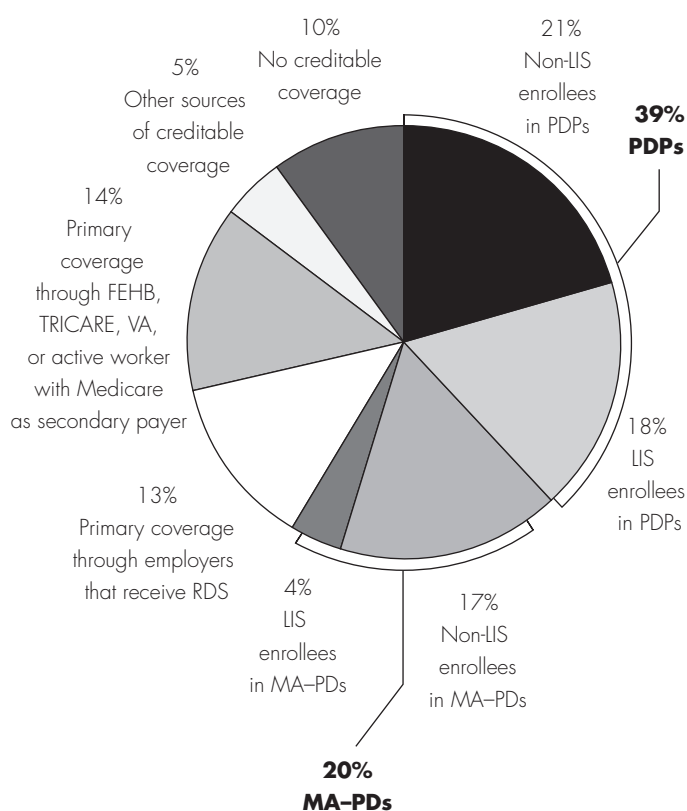
Medicare defines a standard Part D benefit structure with parameters that change at the same rate as the annual change in beneficiaries' average drug expenses (Table 5-1). (Within limits, plan sponsors can offer alternative benefit designs that have different benefit parameters.) For 2010, the defined standard benefit includes a \$310 deductible and 25 percent coinsurance until the enrollee reaches \$2,830 in total covered drug spending. Enrollees exceeding that total face a coverage gap, under which the enrollee is responsible for the full discounted price of covered drugs (usually without including manufacturers' rebates) up to an annual threshold of \$4,550 in out-of-pocket spending that excludes cost sharing paid by most sources of supplemental coverage, such as employer-sponsored policies. An individual with no other source of drug coverage reaches this limit at \$6,440 in total drug spending (the combination of the enrollee's spending plus spending the Part D plan covers). Enrollees with drug spending exceeding that amount pay the greater of either \$2.50 to \$6.30 per prescription or 5 percent coinsurance.

Part D enrollees' access to prescription drug benefits

In general, Medicare beneficiaries appear to have good access to prescription drugs. All individuals have access to dozens of Part D plan options, and many continue to receive drug coverage through employers. A potential concern is whether enrollees who do not receive the LIS and have many prescriptions stay on their drug regimens once they reach Part D's coverage gap.

**FIGURE
5-1**

In 2009, 90 percent of Medicare beneficiaries were enrolled in Part D plans or had other sources of creditable drug coverage



Note: LIS (low-income subsidy), PDP (prescription drug plan), MA-PD (Medicare Advantage–Prescription Drug [plan]), RDS (retiree drug subsidy), FEHB (Federal Employees Health Benefits program), VA (Department of Veterans Affairs). TRICARE is the health program for military retirees and their dependents. Creditable coverage means drug benefits that are of equal or greater value to the basic Part D benefit. Sums may not add to totals due to rounding.

Source: CMS Management Information Integrated Repository data as of February 2009.

In 2009, 90 percent of Medicare beneficiaries had drug coverage, 59 percent were in Part D plans

In 2009, all but 10 percent of Medicare beneficiaries had drug coverage at least as generous as Part D's defined standard benefit—called creditable coverage (Figure 5-1). In February 2009, nearly 27 million of 45 million Medicare beneficiaries (59 percent of all beneficiaries, or 65 percent of those with creditable drug coverage) were enrolled in Part D plans.¹ Thirty-one percent of beneficiaries had other sources of creditable coverage,

such as employer-sponsored plans that receive Medicare's retiree drug subsidy (RDS), the Department of Veterans Affairs, TRICARE (the Department of Defense's health benefit for retired military members), and other payers.² An estimated 4.5 million Medicare beneficiaries (10 percent) had no drug coverage or coverage less generous than Part D's benefit. Research indicates that beneficiaries who do not enroll in Part D tend to have lower drug spending, better health, lower risk scores, and lower income (Heiss et al. 2006, Riley et al. 2009).

In 2009, about 9.7 million individuals (21 percent of all Medicare beneficiaries, or 36 percent of Part D enrollees) received the LIS. Of them, 6.3 million were dually eligible to receive Medicare and Medicaid. Another 3.3 million qualified for extra help either because they receive benefits through the Medicare Savings Program or Supplemental Security Income Program, or because they were determined eligible by the Social Security Administration (SSA) after applying directly to that agency. Among LIS beneficiaries, about 8 million (18 percent of all Medicare beneficiaries) are enrolled in stand-alone prescription drug plans (PDPs) and 1.7 million (4 percent) are in Medicare Advantage–Prescription Drug plans (MA–PDs). At the end of 2009, approximately 0.4 million Part D enrollees lost their “deemed status” for the LIS because they no longer qualified for Medicaid, no longer belonged to a Medicare Savings Program, or no longer received Supplemental Security Income. This means that, to receive the LIS in 2010, they had to apply to the SSA and be found eligible (Centers for Medicare & Medicaid Services 2009f). Recent changes in the law affect the types of resources that SSA considers when beneficiaries apply for the LIS, and it estimates that more than 1 million are newly eligible as a result (Social Security Administration 2010).³

In 2007, Part D enrollees were more likely to be female and minority than the overall Medicare population (see Table 5-A1 in the online appendix to this chapter, available at <http://www.medpac.gov>). Compared with PDP enrollees, beneficiaries enrolled in MA–PDs were less likely to be disabled and more likely to be Hispanic, reflecting in part the demographics of areas where MA–PDs are located. LIS enrollees were more likely to be female, minority, and disabled beneficiaries under age 65 than Medicare beneficiaries overall.

Part D enrollment varies geographically. In each of the 34 PDP regions across the country, 2007 enrollment ranged between 40 percent and 68 percent of Medicare beneficiaries (Figure 5-A1 in the online appendix to this

chapter). Part D enrollment tends to be lower in states with large employers that receive Medicare's RDS, such as Michigan and Ohio. In parts of the West (Nevada, New Mexico, Colorado, and California), Florida, and parts of the Northeast (Pennsylvania and West Virginia), 40 percent or more of enrollees are in MA-PDs (Figure 5-A2 in the online appendix to this chapter). By comparison, in other parts of the Northeast, Midwest, and in the South central states, fewer than 20 percent of Part D enrollees are in MA-PDs.

The number of beneficiaries receiving the Part D LIS also varies considerably by region. In 2007, 50 percent or more of enrollees in Alaska, Maine, New Hampshire, Mississippi, Alabama, Louisiana, and Tennessee received the LIS (Figure 5-A3 in the online appendix to this chapter). By comparison, no more than 30 percent of enrollees in the upper Midwest and several central western states received the LIS. Participation rates in the Part D LIS reflect factors such as underlying rates of poverty and health status, the degree to which state outreach efforts were successful at enrolling eligible individuals, and how states set eligibility criteria. For example, states can increase the numbers of beneficiaries who may join a Medicare Savings Program by not counting certain types of assets or sources of income in their eligibility criteria for Medicaid benefits (Medicare Payment Advisory Commission 2008).

Distribution of enrollment across plan types

Most Part D enrollees are in plans other than the Part D standard benefit; those plans are actuarially equivalent to the standard benefit or are enhanced in some way. Actuarially equivalent plans have the same average benefit value as defined standard plans but a different benefit structure (both actuarially equivalent and defined standard plans are referred to as basic benefits).⁴ For example, a plan may use tiered copays (e.g., charging \$7 per generic prescription and \$50 for a prescription of a brand-name drug) rather than 25 percent coinsurance. Alternatively, instead of having a deductible, a plan may use cost sharing equivalent to a rate higher than 25 percent. Once a sponsor offers at least one PDP with basic benefits in a region, it may also offer a plan with enhanced benefits—basic and supplemental coverage combined, with a higher average benefit value. Medicare does not subsidize supplemental benefits; enrollees must pay the full premium for the additional coverage.

In 2009, 63 percent of PDP enrollees were in actuarially equivalent basic plans, most with tiered copays. Another

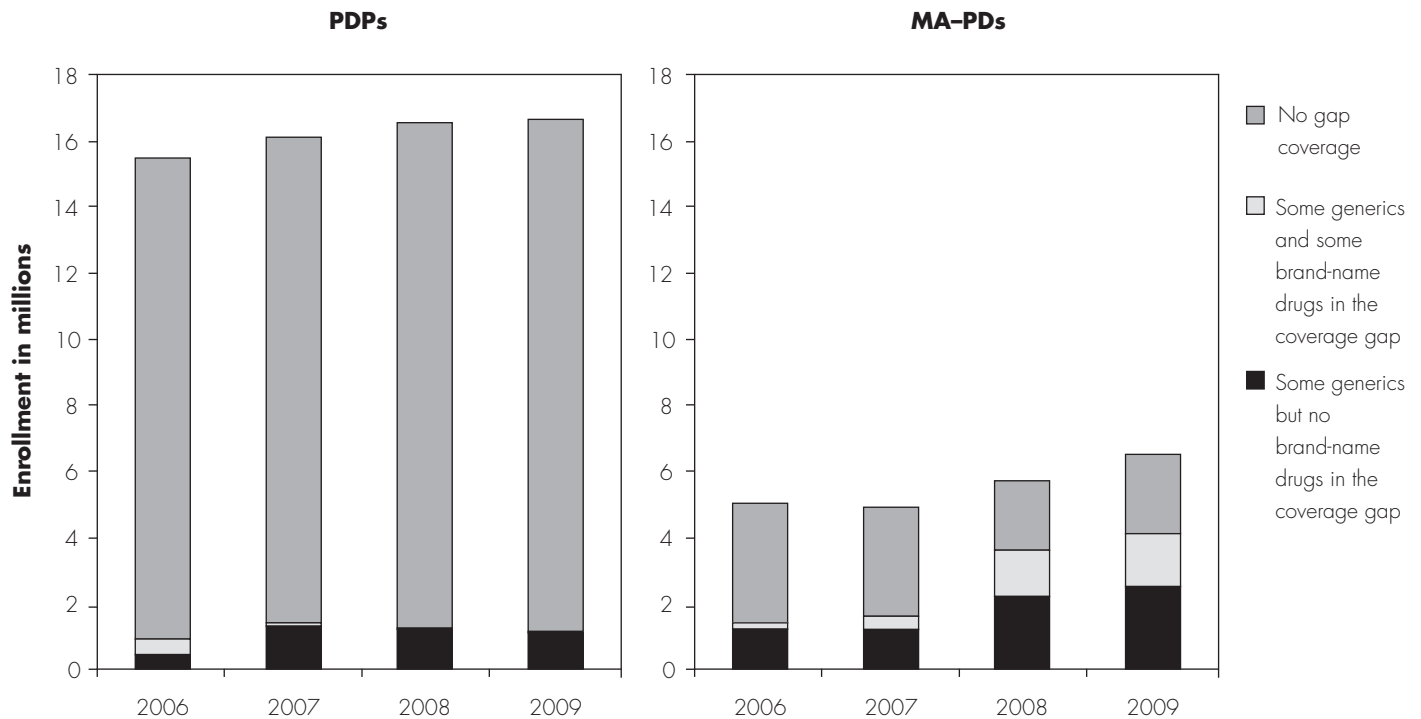
26 percent of PDP enrollees had enhanced benefits—the typical enhancement being a lower deductible rather than benefits in the coverage gap.⁵ MA-PD enrollees were also predominantly in plans that use copays, and 94 percent were in enhanced plans.

Enrollees in PDPs are more likely to have a deductible than enrollees in MA-PDs. In 2009, about half of PDP enrollees paid no deductible or a lower deductible than was prescribed in the defined standard benefit; the remaining enrollees were in plans with the standard \$295 deductible. By comparison, 95 percent of MA-PD enrollees had no deductible. This situation reflects, under the Part C payment system (which is used to pay MA plans), the ability of MA-PDs to use 75 percent of the difference between the plan's benchmark payment and its bid for providing Part A and Part B services (known as Part C rebate dollars) to supplement benefits or lower premiums. Many MA-PDs use some of their Part C rebate dollars to enhance their Part D benefit by charging no deductible, providing benefits in the coverage gap, or reducing their premium.

A similar pattern of differences between PDPs and MA-PDs holds for benefits in Part D's coverage gap (Figure 5-2, p. 288). In 2009, only 7 percent of PDP enrollees (1.1 million beneficiaries) were in plans that offered benefits in the coverage gap, usually for generic drugs rather than brand-name drugs. However, 45 percent of PDP enrollees received Part D's LIS, which effectively eliminates their coverage gap. By comparison, 63 percent of MA-PD enrollees (4.1 million beneficiaries) were in plans offering gap coverage, generally covering generics but not brand-name drugs.

Use of Part D benefits and share of enrollees reaching the coverage gap

Prescription drugs are used widely by beneficiaries. According to the Commission's analysis of 2007 prescription drug event data, nearly 92 percent of Part D plan enrollees filled at least one prescription during the year. Enrollees filled an average of 3.9 prescriptions per month, with considerably higher average utilization among those who received the LIS (4.6 per month) than among beneficiaries who did not (3.4 per month). While LIS enrollees tend to have a greater disease burden than non-LIS enrollees, under Part D they have much lower cost sharing, ranging from no copays to about \$6 per prescription for dual-eligible beneficiaries who have the most comprehensive benefits. Other LIS enrollees pay

**FIGURE
5-2****PDP enrollees are less likely to have benefits in the coverage gap**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]).

Source: MedPAC analysis of CMS landscape and enrollment data for 2009.

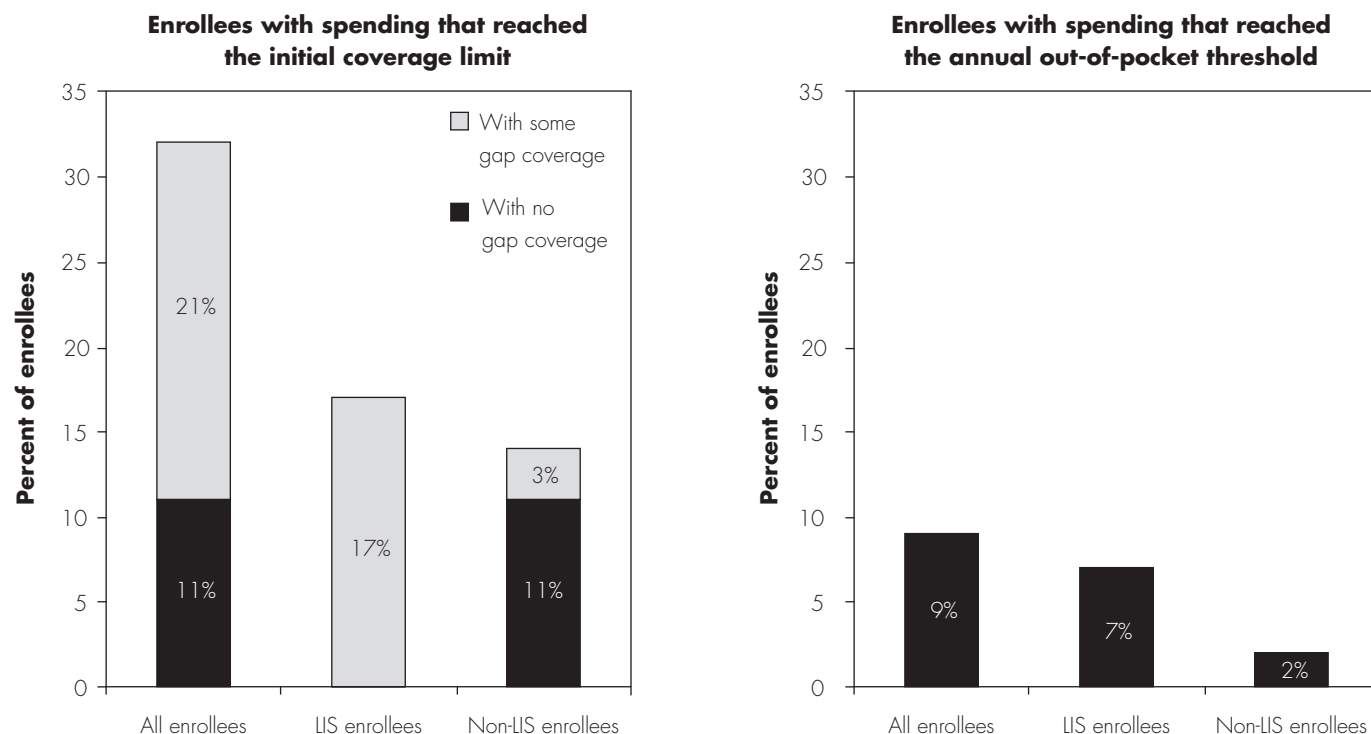
15 percent coinsurance. By comparison, in 2009, median copays for non-LIS enrollees were about \$7 per generic prescription and more than \$75 per prescription for nonpreferred brand-name drugs.

In 2007, nearly a third of Part D enrollees (8.3 million) had benefit spending high enough to put them in the coverage gap, but only 1 in 10 paid 100 percent cost sharing (Centers for Medicare & Medicaid Services 2008). In Part D's coverage gap, most non-LIS enrollees face 100 percent of the plan's negotiated cost of the drug, unless they are in a plan that provides some benefits in the gap. In 2007, about 2.9 million beneficiaries (11 percent of Part D enrollees) were exposed to 100 percent cost sharing in the coverage gap (left-hand side of Figure 5-3). Another 0.9 million non-LIS beneficiaries (3 percent of Part D enrollees) were in enhanced plans that provided some benefits in the coverage gap—usually limited to generic drugs. LIS enrollees, for whom the gap is eliminated, accounted for more than half of the enrollees

with higher spending (4.5 million, or 17 percent of all Part D enrollees). About 9 percent of Part D enrollees had spending that reached Part D's catastrophic threshold (right-hand side of Figure 5-3). Of these 2.3 million individuals, nearly 2 million (7 percent of Part D enrollees) received the LIS.

Different effects of coverage gap on LIS and non-LIS enrollees

To provide a qualitative look at beneficiary experiences with Part D, the Commission evaluated 12 beneficiary focus groups in 3 markets (Baltimore, Chicago, and Seattle) from July to August 2009. Groups averaged eight participants. Six groups were composed of LIS recipients, and six were composed of beneficiaries who reached or anticipated reaching the coverage gap in 2009 or had reached the gap in previous years. Although focus groups cannot provide the precision or comprehensiveness of quantitative findings, they enable us to gain more real-time knowledge of how the benefit is working.

**FIGURE
5-3****About 1 in 10 Part D enrollees faced 100 percent cost sharing in the coverage gap during 2007**

Note: LIS (low-income subsidy). Part D enrollees who receive the LIS do not face a coverage gap. In 2007, Part D enrollees reached the initial coverage limit at \$2,400 in benefit spending. If they had no supplemental coverage, an enrollee reached the annual out-of-pocket threshold at \$3,850 of out-of-pocket spending. Some percent of non-LIS enrollees who reached the catastrophic threshold may have had some gap coverage. Sums may not add to totals due to rounding.

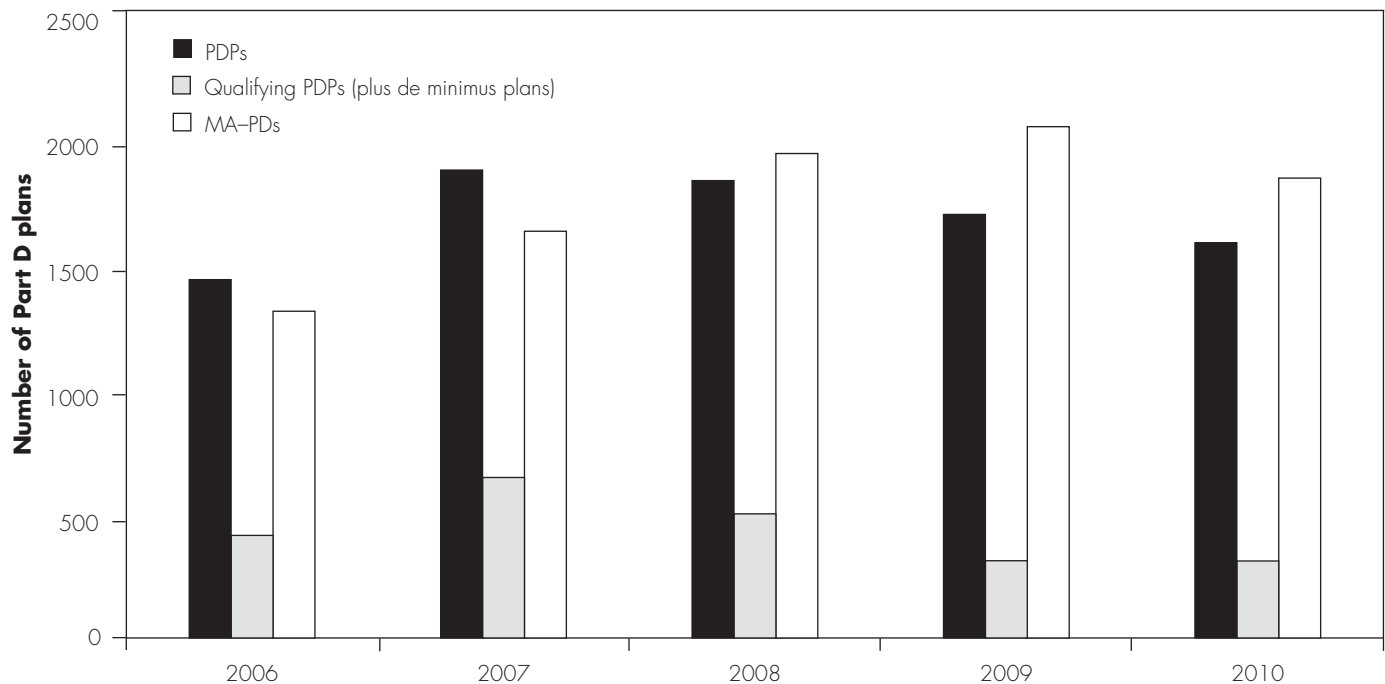
Source: CMS 2008.

LIS beneficiaries, who do not face a gap in their coverage, generally reported good access to their medications. A few individuals reported a delay in getting their drugs because they switched plans or their plan's formulary changed, but these problems were resolved. Only one beneficiary in the LIS groups mentioned that the cost of drugs was a problem.

Conversely, non-LIS beneficiaries who reached the coverage gap were very conscious of costs and sought to minimize them in various ways. One participant who reached the coverage gap in January and two participants who did not reach the gap until November continued to purchase and use medications as they had before they reached the limit. However, in each focus group, other participants reported multiple strategies to lower their costs. Those strategies included seeking drug samples from their physicians, switching to generic alternatives, using mail-order pharmacy service to lower their copays,

asking for higher dosages of their medications and splitting pills to last twice as long, discontinuing one or more of their drugs, taking pills every other day, asking drug companies for assistance, purchasing drugs from Canada, comparing pharmacy prices for their drugs, and purchasing generic drugs from Walmart or similar stores that sell some generic prescriptions for \$4. In the latter case, the idea was to postpone reaching the coverage gap by not using their Part D insurance for these purchases.

Some beneficiaries carried out these strategies in collaboration with their physicians, but others did not. For example, some never told their physicians they had stopped taking certain drugs. Focus group participants were more likely than in previous years to report that they told their physicians they could not afford to keep taking some medications. In many cases, the physician suggested alternative drugs or other strategies to ensure that patients continued to receive treatment.

**FIGURE
5-4****Numbers of Part D plans decreased somewhat in 2010**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Qualifying PDPs are plans for which low-income subsidy (LIS) enrollees pay no premium because the plans' premiums are at or below a regional premium threshold. De minimus plans are plans that CMS permitted to retain their LIS enrollees because the plan premium was within a small variance from the regional LIS premium threshold.

Source: CMS landscape files and Part D bid data.

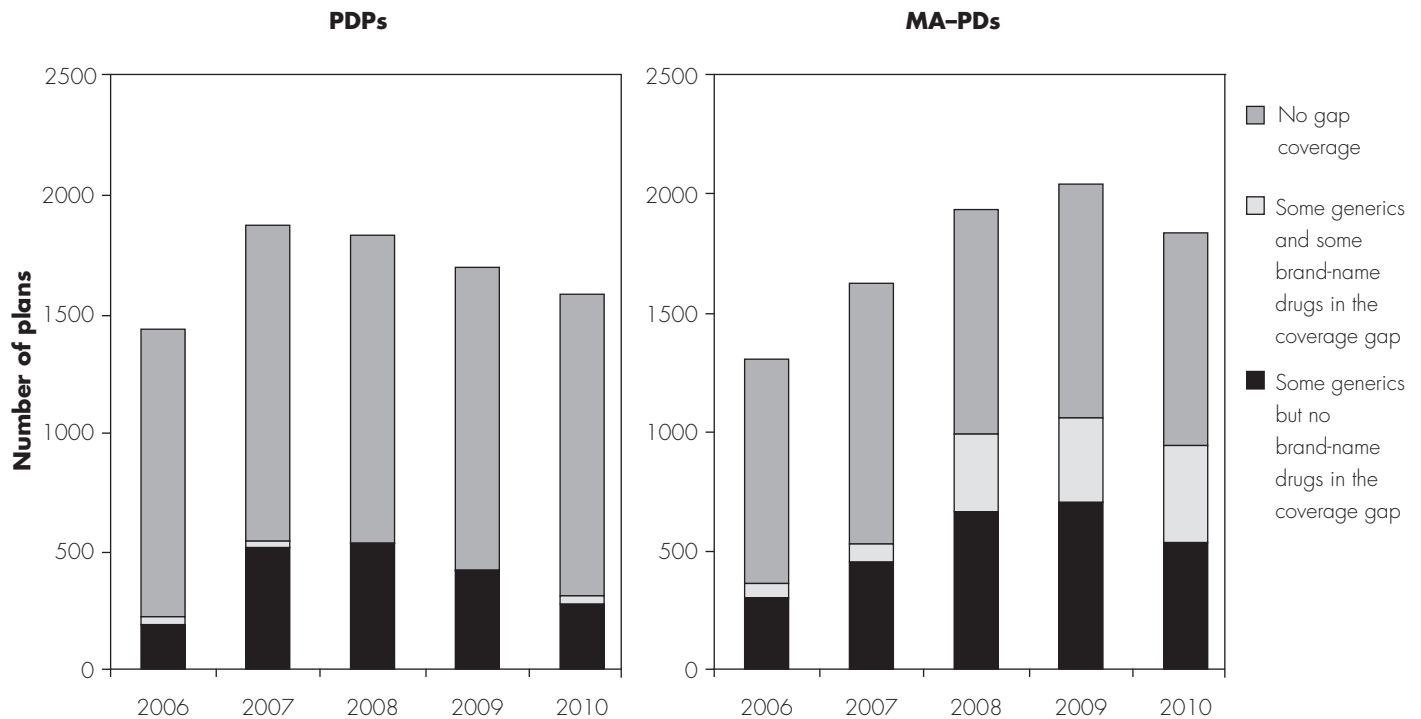
Many focus group participants reported that they used these strategies without apparent adverse consequences. However, others reported some additional costs or adverse effects. For example, some beneficiaries reported needing additional physician visits to monitor the effects of changes to their drug regimen. Others experienced side effects from the new medications or had poorer control of their condition. Some continued on replacement drugs while others went back to their original regimens.

Broad availability of plans in 2010

Beneficiaries continue to have many choices of Part D plans in each region. In 2010, sponsors are offering a total of 1,576 PDPs, or about 7 percent fewer than in 2009 (Figure 5-4).⁶ There are 1,834 MA-PDs available, or about 10 percent fewer than in 2009, reflecting a decline in the number of local health maintenance organizations as well as a drop by about one-third in the number of

private FFS plans offered. CMS estimates that decisions by either plan sponsors or CMS not to renew contracts for the upcoming year affected nearly 400,000 MA-PD enrollees (Hill 2009). Still, Medicare beneficiaries continue to have 41 to 55 PDP options, along with many (sometimes dozens of) MA-PDs. The number of MA-PD plans available to a beneficiary varies by the county of residence.

For 2010, LIS enrollees have about the same number of PDPs available to them at no premium as in 2009. A total of 307 PDPs have premiums at or below the LIS monthly premium subsidy amount for their region, compared with 308 in 2009 (Figure 5-4). In addition, 133 MA-PDs and 295 MA special needs plans (SNPs) qualified as premium-free to LIS beneficiaries who enroll in them. Each region has at least four PDPs available to LIS enrollees at no premium. (See Table 5-A2 in the online appendix to this chapter.)

**FIGURE
5-5****MA-PDs are more likely than PDPs to offer benefits in the coverage gap**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]).

Source: MedPAC analysis of CMS landscape data for 2009.

Notable changes for 2010 in benefit design and formularies

Those beneficiaries who reexamined their options for the 2010 benefit year may have found some important changes in plan coverage, particularly if they were in PDPs that did not charge a deductible in 2009, if they received the Part D LIS, or if they were in a private FFS MA-PD.

Benefit designs

For the 2010 benefit year, organizations that offer PDPs tightened many of their plans' benefit designs, while the structure of drug benefits in MA-PDs held fairly steady. A smaller share of PDPs has no deductible in 2010—40 percent compared with 55 percent in 2009. The proportion of MA-PD offerings that charge no deductible is roughly the same in both years—about 90 percent.

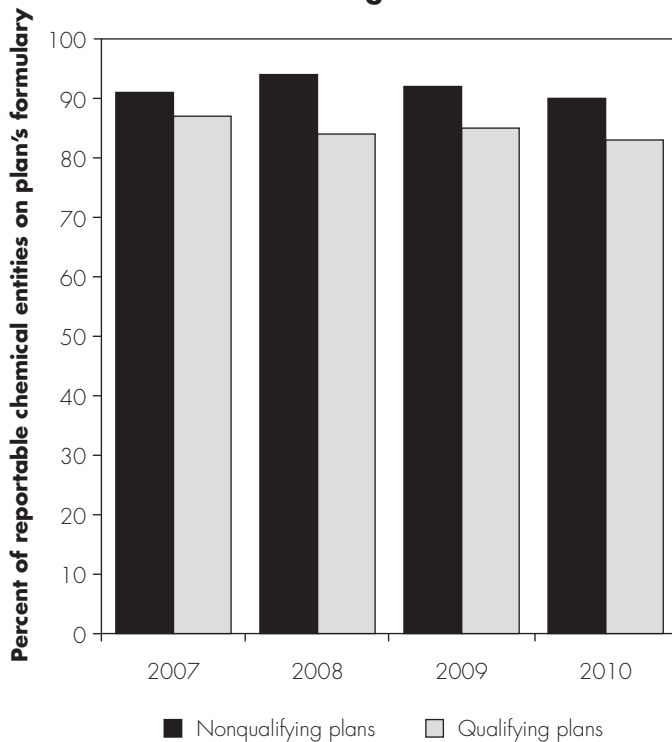
In 2010, a somewhat smaller percentage of PDPs provides gap coverage (Figure 5-5). In 2009, about 25 percent of PDPs (more than 400 plans out of nearly 1,700 PDPs)

included some gap coverage—usually some or all generic drugs but no brand-name medications. For 2010, that share fell to 20 percent (about 300 PDPs out of nearly 1,600).

In contrast, the share of MA-PDs with gap coverage held steady at just over 50 percent in 2010 (more than 900 plans out of nearly 1,800 MA-PDs); among those plans with such coverage, a slightly higher share cover some brand-name drugs (in addition to generics). Among both PDPs and MA-PDs, the share of plans offering coverage of all generic drugs has been declining, and a sizable share charge higher cost sharing for generics after the enrollee has reached the coverage gap (Hoadley et al. 2009c).

Plan formularies

In Part D, each plan sponsor operates one or more formularies—lists of the drugs the plans cover and the terms under which they cover them—to manage the cost and use of prescription drugs. When designing formularies, sponsors strike a balance between providing enrollees with access to medications and controlling growth in drug spending, which they

**FIGURE
5-6****Plans that qualify as premium-free
to LIS enrollees tend to list fewer
drugs on their formularies**

Note: LIS (low-income subsidy). Excludes plans that qualified to keep LIS enrollees based on waivers for 2007 and 2008. Also excludes plans offered by WellCare because that sponsor's formulary data were not available at the time this analysis was prepared. Calculations are weighted by total plan enrollment. Number of nonqualifying plans: 2007=1,228, 2008=1,228, 2009=1,379, 2010=1,222. Number of qualifying plans: 2007=483, 2008=442, 2009=308, 2010=288.

Source: NORC/Georgetown University/Social and Scientific Systems analysis for MedPAC of formularies submitted to CMS and Part D enrollment data.

accomplish by negotiating drug prices and dispensing fees with pharmacies and rebates with pharmaceutical manufacturers, and by managing enrollees' utilization. Part D sponsors rely on clinicians—generally physicians and pharmacists who participate on a pharmacy and therapeutics committee—when deciding which drugs to list. Sponsors also select the cost-sharing tier for each listed drug and whether any utilization management tools apply, taking into account clinical and financial factors (such as how tier-placement decisions might affect sponsors' rebates from drug manufacturers). Making all medications readily accessible at preferred levels of cost sharing can lead to Part D premiums that are high relative to a sponsor's competitors, whereas an overly restrictive formulary may keep a plan's premium competitive but

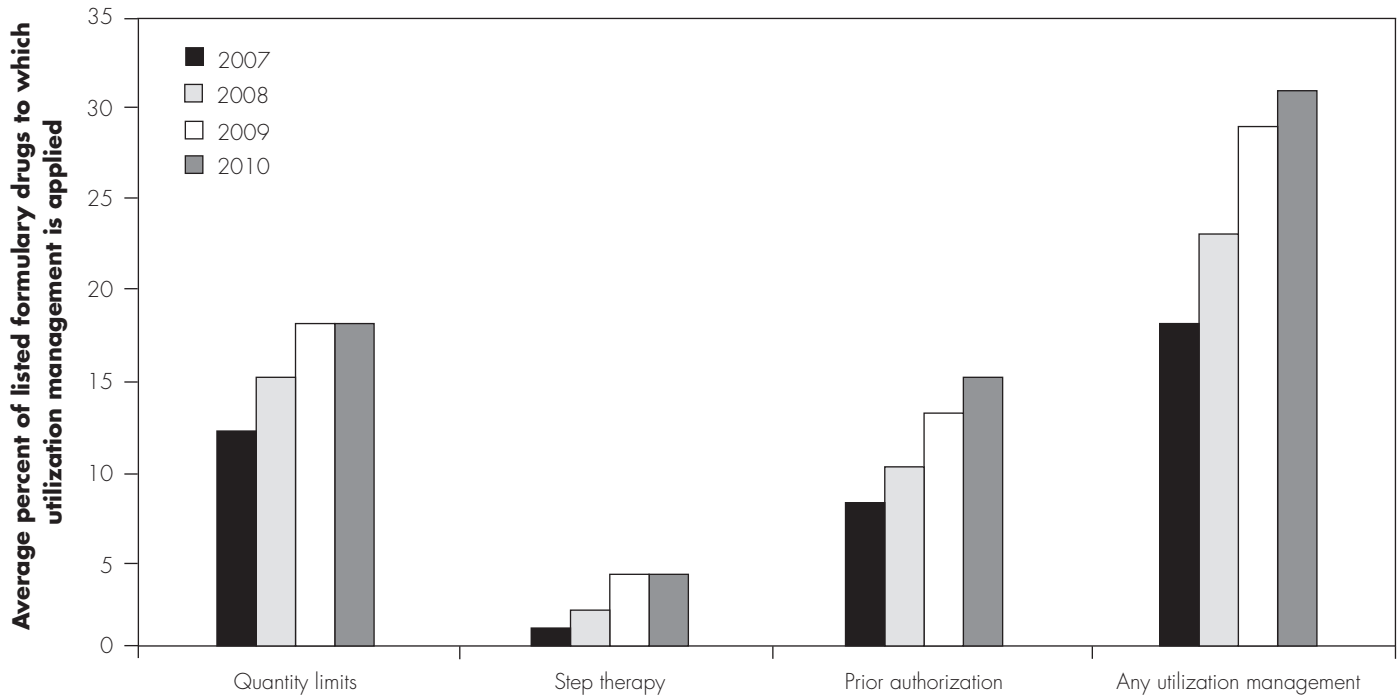
may make the plan less attractive to potential enrollees because it covers a limited number of drugs.

Under contract with the Commission, researchers at NORC at the University of Chicago, Georgetown University, and Social and Scientific Systems analyzed Part D formulary data. CMS generally requires that plan formularies include at least two drugs in each therapeutic category and class unless only one drug is available. For this analysis, drugs are defined at the level of chemical entities—a broader grouping that encompasses all of a chemical's forms, strengths, and package sizes. The definition combines brand-name and generic versions of the same chemical entity (Medicare Payment Advisory Commission 2008).⁷

CMS data show that about 80 percent of all Part D enrollees are in plans that use: (1) a single cost-sharing tier for generic drugs; (2) two tiers for brand-name drugs (a preferred tier with lower cost sharing and a nonpreferred tier); and (3) a specialty tier for expensive products, unique drugs, and biologics.^{8,9} Only about 10 percent or fewer of enrollees are in plans that use the 25 percent coinsurance of Part D's standard benefit design. The remaining enrollees are in plans that use other formulary structures.¹⁰ (See Figure 5-A4 in the online appendix to this chapter.)

The number of drugs that sponsors list on a formulary is another way to view beneficiaries' access to prescription drugs under Part D, but caution is in order, as that number does not provide a complete picture. Plans' processes for nonformulary exceptions, prior authorization, quantity limits, and step therapy requirements can strongly affect access as well.¹¹ For example, in some cases unlisted drugs are covered through the nonformulary exceptions process, which is relatively easy with some plan sponsors and more burdensome with others. Alternatively, some sponsors do not automatically cover drugs listed on their formulary if prior authorization is required before filling a prescription.

For 2010, the average PDP enrollee is in a plan that lists 88 percent of all distinct chemical entities on which CMS requires sponsors to report (referred to here as reportable drugs), while the average MA-PD enrollee is in a plan listing 90 percent (Figure 5-A5 in the online appendix to this chapter).¹² This relative breadth of the formulary for the average Part D enrollee has been stable since the program's inception.¹³ Still, the number of drugs listed can vary considerably among plans, from 37 percent for plans with the smallest formularies to 100 percent for other plans.

**FIGURE
5-7****PDP's use of utilization management tools has grown over time**

Note: PDP (prescription drug plan). Calculations are weighted by total plan enrollment.

Source: NORC/Georgetown University/Social and Scientific Systems analysis for MedPAC of formularies submitted to CMS and Part D enrollment data.

Cost sharing for LIS enrollees is set statutorily and is much lower than for other enrollees. As a result, plan sponsors may need to use different strategies to manage drug utilization if they anticipate having a relatively high percent of enrollees who receive the LIS. Typically, sponsors rely on the differences they set between copays for drugs available on their formulary's tiers to steer enrollees toward using generic and preferred brand-name drugs. Because LIS enrollees face low or no cost sharing, sponsors with higher proportions of LIS enrollment may need to rely more heavily on a tighter formulary or utilization management tools, such as prior authorization. At the same time, large differences between the formularies of plans that qualify as free to LIS enrollees and those that do not could raise concern about inequitable access to drugs.

CMS data show that plans qualifying as premium-free to LIS enrollees tend to have somewhat smaller formularies than plans that do not qualify. In 2010, an LIS qualifying plan had, for the typical enrollee, an average of 83 percent of reportable drugs (chemical entities) listed on its

formulary, compared with 90 percent for a nonqualifying plan (Figure 5-6).

The use of utilization management tools in Part D—including quantity limits, step therapy, and prior authorization—has grown over time (Figure 5-7). Sponsors use such tools for drugs that are expensive; potentially risky; or subject to abuse, misuse, or experimental use. They also want to encourage use of lower cost therapies. Some tools are more common than others. For example, all PDPs and MA-PDs use prior authorization for at least one drug on their formulary. For 2010, the average enrollee in a PDP faces some sort of utilization management for 31 percent of listed drugs—an increase from 18 percent in 2007. Quantity limits are used for 18 percent of drugs, step therapy for 4 percent, and prior authorization for 15 percent. The use of specific tools varies by drug class.

LIS enrollees and plan reassignments

Part D's LIS covers the cost of an enrollee's premium up to a specified amount. Each year, CMS sets an LIS

Do plan sponsors want low-income subsidy enrollees?

Many beneficiaries who receive Part D's low-income subsidy (LIS) follow a different enrollment path than other individuals. For 2006, LIS enrollees who did not choose a plan for themselves were randomly assigned to plans with premiums at or below regional benchmarks. Bidding low enough to win LIS enrollees may have been especially attractive to plan sponsors when CMS was launching Part D, because they did not know how much of the market they would have, nor did sponsors incur marketing costs for autoassigned members.

Now that Part D is in its fifth year, it may be important to ask whether plan sponsors are still seeking to enroll beneficiaries who receive the LIS. Some clearly do: The percentage of their members who receive the LIS is high in some plans and their sponsors appear to be profitable. Yet, other plan sponsors may not want LIS members because they tend to have poorer health and use more prescription drugs. In turn, more LIS members could lead a plan to have higher benefit spending and premiums.

In 2009, several sponsors lost considerable numbers of LIS enrollees because their plans' premiums were above regional benchmarks for LIS premiums.

In asking what might have led to this result, the Commission cited the importance of good risk adjustment to effective program performance. As long as Medicare's risk-adjusted payments for LIS enrollees cover plans' average benefit costs, sponsors have an incentive to bid low to keep or attract those beneficiaries. But if risk adjusters do not compensate adequately for LIS enrollees, an incentive may exist for sponsors to bid higher to avoid LIS enrollees. Commission-sponsored research found that adding information about beneficiaries' past drug utilization could increase the explanatory power of Part D's risk-adjustment system (Medicare Payment Advisory Commission 2009b). CMS is exploring this idea.

Among plans for 2010, a number of prescription drug plan sponsors are offering basic and enhanced plans side by side in the same region, with premiums for basic plans higher than those for enhanced benefits (Hoadley et al. 2009a). This event is notable because LIS enrollees are assigned randomly only to plans that offer basic benefits—CMS cannot reassign them to enhanced plans that provide supplemental benefits. Offering enhanced plans with lower premiums allows sponsors to compete for non-LIS beneficiaries without being assigned new LIS enrollees. ■

premium threshold for each PDP region based on a weighted average of plans' premiums for basic benefits.¹⁴ As long as a plan's premium falls below the required benchmark, LIS beneficiaries pay no premium or a reduced premium and cost sharing if they remain in the plan.¹⁵ However, LIS beneficiaries may be reassigned automatically on a random basis to a different plan each year if their current plan's premium is too high. LIS enrollees may remain in their existing plan if they choose to pay the additional premium above the LIS benchmark; CMS refers to these individuals as "choosers."

Numbers of LIS reassigees

Nearly three million LIS enrollees were affected by the turnover of qualifying plans for 2010:

- CMS had to reassign an estimated 1.06 million LIS enrollees to plans offered by a different sponsor because their previous plan's premium did not fall below the 2010 threshold (Centers for Medicare & Medicaid Services 2009a). This number of reassigees is nearly the same as it was in 2009.
- Another 0.1 million were reassigned to a qualifying plan offered by the same sponsoring organization (Centers for Medicare & Medicaid Services 2009a). When sponsors use the same formulary for all their plans, these reassigned individuals are less likely to face significant changes.
- In late 2009, 1.7 million LIS members were enrolled in a plan they had selected (i.e., they did not remain in a randomly assigned plan) but that plan did not qualify

as premium-free for 2010 (Centers for Medicare & Medicaid Services 2009e). It is not yet clear how many of these “choosers” picked a new qualifying plan themselves for 2010 or are paying a portion of their premium to remain in the same plan.

For 2009, CMS used rulemaking authority to change the way it set the LIS premium thresholds to reduce LIS reassignments.¹⁶ Even with this approach, however, the number of reassignees remained high for 2010, and CMS officials did not believe the policy change addressed the issue adequately. In August 2009, CMS announced that it was using general demonstration authority to further adjust LIS premium thresholds (Centers for Medicare & Medicaid Services 2009d). Under its general demonstration authority, CMS set the premium thresholds by first removing Part C rebate dollars from MA–PD premiums before averaging plan premiums. Without such an action, the agency estimates that the number of LIS reassignees for 2010 would have been twice as large (Hill 2009). CMS’s Office of the Actuary estimated that the demonstration would cost \$110 million in 2010.

LIS choosers

Some LIS enrollees choose to remain in their current plan rather than be reassigned to a new one. If at any time LIS enrollees select a plan different from their random assignment, CMS no longer reassigns them. By one preliminary estimate, about 2.5 million LIS enrollees fell into this “chooser” category for 2010 (Hill 2009). Some of these individuals were in plans that qualified as premium-free for 2010, were in MA–PDs, or participated in state pharmacy assistance programs. There were 1.7 million in plans that did not qualify; they received a letter from CMS notifying them that they could either switch to a qualifying plan or remain in the same plan and pay the difference between the plan’s premium and the threshold amount that Medicare covers in the region. The premium amount such individuals need to pay differs across plans, ranging from 10 cents to more than \$86 per month. The most common amounts are \$8 to \$10 per month.

Effects of switching plans

Beneficiaries who switch plans and the physicians and pharmacies who serve them could face transition issues as they change formularies. For example, an enrollee may need to negotiate transition supplies of drugs and try to navigate different coverage rules. (Under CMS policy, during the first 90 days of a beneficiary’s enrollment, sponsors are required to provide a 30-day supply of the enrollee’s current

medication, even if it is not covered on the plan’s formulary, to give the enrollee time to obtain a substitute drug or request a formulary exception. In addition, dually eligible enrollees may change Part D plans monthly.) Enrollment and LIS eligibility information is transmitted through less than up-to-date data systems that must connect sponsors, states, CMS, SSA, and pharmacies. At the point of service, pharmacists must know the beneficiary’s plan and applicable copay. A potential outcome is that enrollees may discontinue needed medication.

The Commission and CMS have begun investigating how the current process of reassignment affects LIS enrollees. Focus groups of LIS enrollees conducted for the Commission in 2009 did not report many problems resulting from switching from one plan to another. An empirical analysis conducted for CMS of reassignments completed early in the Part D program found that health outcomes—as measured by rates of mortality, hospitalizations, and emergency room use—were no different between LIS enrollees who had been reassigned and LIS enrollees who had not (Centers for Medicare & Medicaid Services 2009b). CMS and the Commission will continue to explore this issue.

Should policymakers take steps to reduce the number of LIS enrollees who must switch plans? Transitions between plans may be particularly challenging for dual-eligible beneficiaries, who tend to have more chronic conditions and use more prescription drugs. Some of these individuals have cognitive impairments and may lack family support to help them navigate the transition to a new plan’s formulary. On the other hand, Part D enrollees who do not receive the LIS also face transition issues. For example, one estimate suggests that 27 percent of non-LIS PDP enrollees face a premium increase of \$5 per month or more in 2010 if they do not change plans (Hoadley et al. 2009b). Some of those individuals will find such an increase unaffordable, will need to switch plans, and may need to change some medications or seek formulary exceptions. Additionally, enrollees who remain in the same plan may still face some transition issues if their plan’s formulary changes from one year to the next

Costs of Part D

To review Part D’s costs, we examined aggregate program spending, trends in plans’ bid amounts, trends in the prices

**TABLE
5-2****Medicare's reimbursements for Part D on an incurred basis**

	Calendar year			
	2006	2007	2008	2009*
In billions of dollars				
Direct subsidy	\$17.6	\$18.1	\$17.5	\$18.8
Reinsurance	6.0	8.0	9.7	10.9
Low-income subsidy	15.1	16.7	18.2	19.9
Retiree drug subsidy	3.8	3.7	3.7	3.7
Total	\$42.5	\$46.6	\$49.1	\$53.4
Annual percentage change				
Direct subsidy	N/A	2.6%	-3.3%	7.8%
Reinsurance	N/A	33.5	20.7	12.4
Low-income subsidy	N/A	11.0	8.8	9.1
Retiree drug subsidy	N/A	-2.7	-0.6	1.1
Total	N/A	9.5	5.4	8.7

Note: N/A (not applicable). The numbers above reflect reconciliation amounts. Most enrollees paid premiums directly to Part D plans and those amounts are not included above. On a cash basis, the Board of Trustees estimates that premiums paid by enrollees totaled \$3.5 billion in 2006, \$4 billion in 2007, \$5 billion in 2008, and \$6.3 billion in 2009. Totals may not sum due to rounding.

*Estimated.

Source: MedPAC based on Table IV.B.10 of the Medicare Board of Trustees' report for 2009.

plans obtain for drugs at the pharmacy counter, enrollees' premiums, and plans' cost-sharing requirements.

Components of Part D plan payments

Medicare pays sponsors three major types of subsidies on behalf of each enrollee in their plans:

- Direct subsidy—a monthly payment to plans set as a share of the national average bid for Part D basic benefits, adjusted for the risk of the individual enrollee.
- Reinsurance—Medicare subsidizes 80 percent of drug spending above an enrollee's catastrophic threshold. Reinsurance reduces risk for Part D sponsors by providing greater federal subsidies for the highest cost enrollees.
- Low-income subsidy—Medicare pays projected LIS benefits to the plan to cover expected cost sharing and premiums for enrollees who are eligible for the LIS.

The first two types of subsidies combined average 74.5 percent of the cost of basic Part D benefits. In addition,

Medicare establishes symmetric risk corridors separately for each plan to limit a plan's overall losses or profits. Under risk corridors, Medicare limits each plan's potential losses or gains by financing a portion of any higher-than-expected costs or by recouping a portion of higher-than-expected profits.

Low-income subsidy: Largest share of Part D costs

Between 2006 and 2008, incurred reimbursements for Part D (including spending for the RDS) grew from \$42.5 billion to \$49.1 billion (Table 5-2). In 2008, the total was made up of \$17.5 billion in direct subsidy payments to plans, \$9.7 billion in payments for individual reinsurance, \$18.2 billion for the LIS, and \$3.7 billion in RDS payments. CMS's Office of the Actuary estimated that Part D spending totaled \$53.4 billion in 2009 (Boards of Trustees 2009).

As of 2008, spending for the LIS was the largest component of Part D spending—\$18.2 billion compared with \$17.5 billion in direct subsidies. Moreover, substantial portions of other categories of spending were

made on behalf of LIS enrollees. Thirty-six percent of Part D enrollees receive the LIS. However, those individuals tend to use more medications than non-LIS enrollees, and so disproportionate shares of spending for the direct subsidy and for individual reinsurance also reflect benefits for LIS enrollees.¹⁷

Notably, Medicare payments for individual reinsurance have grown considerably faster than other components of Part D spending. The Office of the Actuary attributes part of the very high growth rates in 2007 and 2008 to plans' relative inexperience at bidding and a lack of good claims information on which to base their bids. (Note, for example, that plan sponsors had to submit bids for 2008 benefits in June 2007—before CMS had finished reconciling with plans on final payments for the 2006 benefit year.) Another force behind the growth in reinsurance spending was the trend in costs for drugs in plans' specialty tiers, which typically are higher priced products that have fewer therapeutic substitutes. Although Part D plan sponsors have an incentive to control drug spending, the degree to which they can control spending is weaker for certain drugs. If one drug can be substituted for another, a plan can bargain with manufacturers that want their product placed on the plan's formulary in a favorable position (e.g., on a preferred vs. nonpreferred tier). But if a plan must cover an innovative drug that has no therapeutic substitute, it has little negotiating power over the drug's price.

National average bid: Rose 5 percent in 2010

Between 2009 and 2010, national average costs for basic Part D benefits were projected to grow at 5 percent. (Table 5-A3 in the online appendix to this chapter displays average bids by year and percentage changes in those bids.) Each component of Part D benefit spending is projected to grow at roughly the same rate. Last year, we expressed concern at the high rate of growth in plans' expected individual reinsurance payments, reflecting higher estimates for the cost of Part D's catastrophic coverage. This year, that component is projected to grow at a pace more in keeping with the rest of Part D benefits. Still, given that reinsurance makes up the fastest growing component of aggregate spending, the Commission will continue to watch this issue with interest.

Part D drug prices: A mixed picture

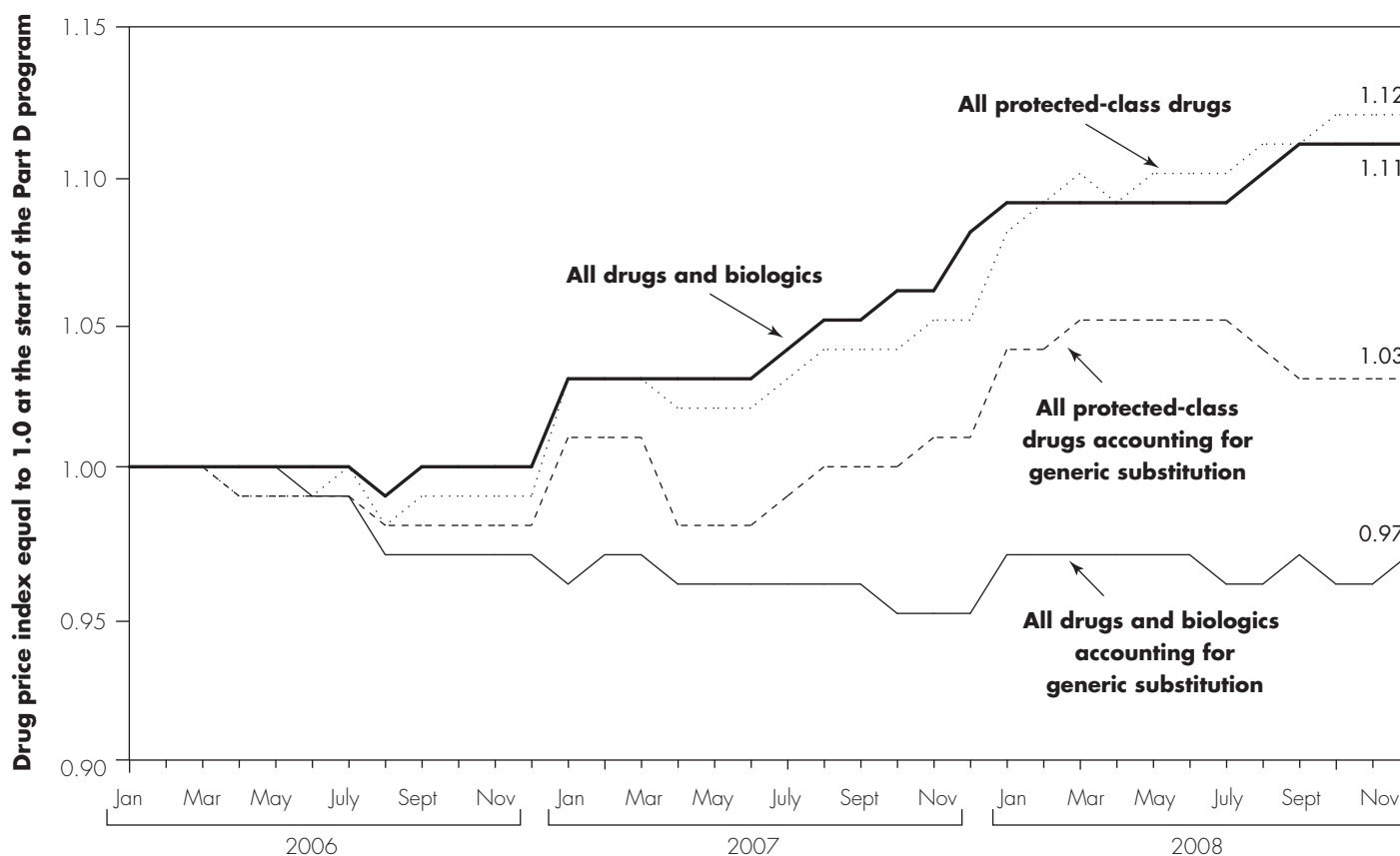
Most plan sponsors do not negotiate drug prices directly with pharmaceutical manufacturers.¹⁸ Instead, sponsors

set up contracts with a network of pharmacies with agreements on prices the plan will pay the pharmacy for drug ingredient costs and dispensing fees. In turn, pharmacies negotiate with manufacturers and wholesalers over the prices at which they will acquire drugs. Still, plan sponsors (or their pharmacy benefit manager (PBM) companies) play an important role by negotiating with manufacturers to receive retrospective rebates. If plan sponsors are successful at steering enrollees toward using certain brand-name drugs relative to other drugs for the same condition, manufacturers pay them an agreed upon amount per prescription. Sponsors and PBMs tend to use rebate revenues to offset plans' benefit spending (reducing plan premiums) rather than lowering the price of prescriptions at the pharmacy counter.

Part D rules require plan formularies to cover at least two drugs in every therapeutic class and key drug type that are not therapeutically equivalent and bioequivalent, unless there is only one drug approved for that class. This policy protects beneficiaries who need a drug that is the only one available for treating a certain condition and allows competition in classes with multiple products. If a product is the only drug of its type, CMS generally requires Part D plans to cover it. For six drug classes in which access to a particular product may be especially important, Part D plans must cover "all or substantially all" drugs in the class. Those classes are antineoplastics, antidepressants, antipsychotics, antiretrovirals, anticonvulsants, and immunosuppressants used by transplant patients.¹⁹

Between 2006 and 2008, prescriptions in these six classes accounted for 11 percent of total Part D claims and 22 percent of drug costs. Although plans must cover these drugs, they can still charge higher cost sharing for them, such as by placing them on tiers for nonpreferred brands. Sponsors can use requirements for prior authorization or step therapy with the intention of steering enrollees to preferred drugs only for beneficiaries who are just starting treatment on a protected-class drug.²⁰

Part D plan sponsors have had mixed success at influencing drug prices. They have been quite successful at encouraging enrollees to use generic alternatives when available (Office of Inspector General 2007). Plan sponsors (and their PBMs) also regularly steer enrollees and negotiate rebates from manufacturers for brand-name drugs that have therapeutic alternatives. But like other purchasers, sponsors have had less success negotiating rebates for unique drug and biologic products.

**FIGURE
5-8****Mixed success at drug prices obtained under Part D**

Note: Chain-weighted Fisher price indexes.

Source: Acumen, LLC, analysis for MedPAC.

To track drug prices, the Commission contracted with researchers at Acumen, LLC, to construct a series of volume-weighted price indexes (Figure 5-8). The indexes do not reflect retrospective rebates from manufacturers but do reflect the prices sponsors and beneficiaries paid to pharmacies at the point of sale (including ingredient costs and dispensing fees). Measured by individual national drug codes (NDCs), Part D drug prices rose by an average of 11 percent cumulatively between January 2006 and December 2008 (MaCurdy et al. 2010).²¹ At the same time, Part D sponsors have had success encouraging enrollees to switch from brand-name drugs to generic substitutes, particularly during the program's first two years. As measured by a price index that takes this substitution into account, Part D prices declined cumulatively by 3 percent between January 2006 and December 2008.²²

An open question has been the degree to which plan sponsors can steer utilization within the six protected drug classes. As measured by individual NDCs, prices for drugs in the six classes showed a trend similar to that for all Part D drugs, rising by a cumulative 12 percent over the three-year period (Figure 5-8). Given their protected status, these drugs might have been expected to experience faster price growth, similar to what Acumen estimated for biologic products (Medicare Payment Advisory Commission 2009a). However, the observed 12 percent growth is influenced heavily by the experience of antidepressant medications, which account for about half of the volume in the six classes and had many generics in the market during this period. Our price index for the individual NDCs of those drugs fell by 11 percent (data not shown). Others of the six classes are made up almost entirely of brand-name drugs, and for these products, prices grew rapidly.

**TABLE
5-3****Comparison of weighted average Part D premiums in 2009 and 2010**

	2009 enrollment (in millions)	Average 2009 premium*	Average 2010 premium*	Percentage change in average premium
PDPs	16.6	\$35.08	\$37.67	7%
MA-PDs, excluding SNPs**	6.2	14.59	13.99	-4
SNPs**	1.1	16.55	21.68	31
All plans	23.8	28.91	30.52	6

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]), SNPs (special needs plans). Estimates are preliminary and subject to change. The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. The MA-PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, demonstrations, and Part B-only plans.

*Values for plans offered in 2009 reflect enrollment levels of those plans in February 2009. Values for plans offered in 2010 reflect enrollment levels of those plans as of January 2010. Note that January enrollment figures may not fully reflect all enrollment changes from the fall 2009 open enrollment period.

**Reflects the portion of MA plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA-PD premiums reflect rebate dollars (75 percent of the difference between a plan's payment benchmark and its bid for providing Part A and Part B services) that were used to offset Part D premium costs.

Source: MedPAC analysis of CMS landscape, bid, and enrollment data.

For example, Acumen's index for the individual NDCs of antineoplastic drugs grew by a cumulative 31 percent (data not shown). When protected-class drugs were grouped to take generic substitution into account more directly, their prices grew by a cumulative 3 percent over the three-year period. Despite the drugs' protected status, plan sponsors appeared to have had success at moving enrollees toward generics for these drugs. However, we expect that the drugs' protected status may keep plan sponsors from negotiating rebates from manufacturers in classes in which one brand-name drug can be a therapeutic substitute for another branded drug. We lack rebate information to test that hypothesis.

Part D premiums: Average rose, but increases are smaller than last year

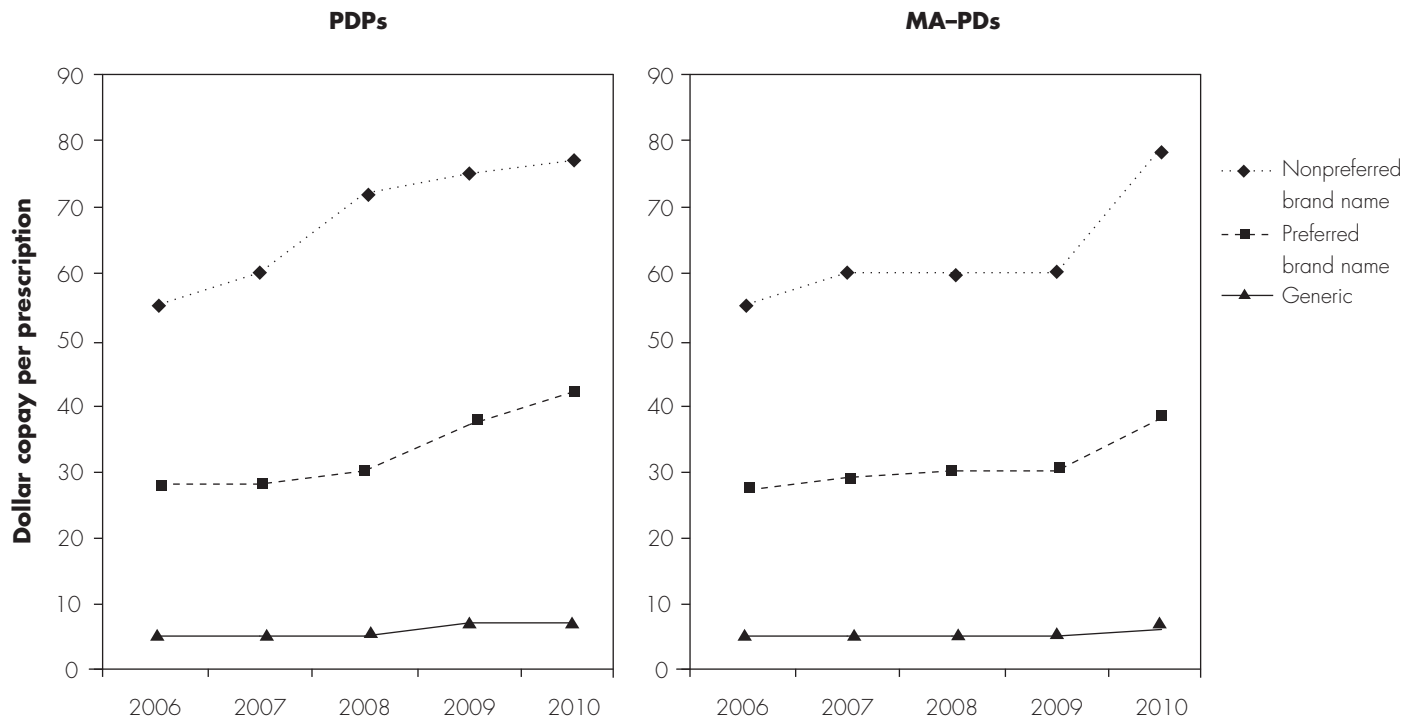
At the time of publication, we estimated that Part D enrollees in 2010 are paying, on average, \$30.52 per month, up \$1.61 (6 percent) from 2009 (Table 5-3). In 2010, the average PDP enrollee pays about \$37.67 per month, or \$2.59 more (7 percent) than in 2009. As in past years, premiums for the most popular PDPs increased more than others, but, in general, premium increases were smaller for 2010 than they were in 2009.

The portion of MA premiums attributable to prescription drug benefits declined by \$0.59 (4 percent), with the average MA-PD enrollee paying \$13.99 per month. (This amount reflects MA-PDs' rebate dollars that come from the MA payment system. Many MA plan sponsors apply

rebate dollars to lower or eliminate their premium for Part D benefits. In 2010, about one-third of MA-PDs charge no additional premium for drug coverage after applying rebate dollars.) The drug benefit component of premiums for MA SNPs grew much more than for other types of MA plans, with average premiums increasing by 31 percent for 2010.

The estimates in Table 5-3 may somewhat overstate the average premium increase that Part D enrollees are experiencing in 2010, because they may not fully reflect how many beneficiaries changed plans. Because of our publication deadline, we used January 2010 data to develop the estimates in Table 5-3. However, that information may not capture final data on reassignments of LIS enrollees and beneficiaries who switched plans at the end of the open enrollment season.

For 2010, the average portion of an MA-PD plan's premium for Part D benefits (before applying rebate dollars from the MA payment system) is approximately \$12.50 less than the average PDP premium. Bids for both PDPs and MA-PDs make up the overall national average bid that CMS uses as the basis for setting program payments. To the extent that MA-PD bids are lower because of better care management and efficiency, they may reduce federal program spending somewhat for Part D. However, lower MA-PD bids may also reflect differences in coding practices for members' underlying conditions or plans' ability to attract healthier members.

**FIGURE
5-9****Median cost sharing for a month's supply of drugs has risen**

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]).

Source: NORC/Georgetown University/Social and Scientific Systems analysis for MedPAC of formularies submitted to CMS.

Plans' cost-sharing requirements: Increased in 2010

Although there is wide variation across plans, for 2010, cost-sharing requirements rose overall (Figure 5-9). Copay levels for the median enrollee in a PDP remained flat at \$7 per 30-day prescription for a generic drug but rose from \$37 to \$42 for preferred brand-name drugs and from about \$75 to \$76.50 for nonpreferred brands (Figure 5-9). Meanwhile, median copays for MA-PD enrollees rose to levels closer to copays charged by PDPs. For 2010, the median enrollee in an MA-PD pays \$6 for a monthly supply of generic drugs, \$38 for preferred brand-name drugs, and \$79 for nonpreferred brands.

For 2010, the median enrollee in a PDP with a specialty tier faces 30 percent coinsurance for drugs in this tier, while the median MA-PD enrollee faces 33 percent.²³ From an enrollee's perspective, cost-sharing requirements for specialty-tier drugs can be high until the enrollee reaches Part D's catastrophic spending limit. In addition, under CMS's regulations, enrollees may not appeal

specialty-tier cost sharing as is permitted for other drugs, such as those on tiers for nonpreferred brands. Because drugs in specialty tiers are often used to treat serious chronic illnesses such as rheumatoid arthritis and multiple sclerosis, patients needing these drugs could face relatively high cost sharing for medications on top of significant out-of-pocket costs for their medical care. From a sponsor's perspective, high-cost drugs may be used more widely than the evidence of their effectiveness supports, and higher coinsurance may temper their use. Moreover, if most of a sponsor's competitors use specialty tiers, it may be important to use a specialty tier to limit the risk of attracting sicker enrollees taking very expensive drugs. Otherwise, those expensive drugs would be available for much lower copays.

Measuring plan performance in Part D

CMS collects data about performance and quality of Part D plans to help it monitor sponsors' operations and

help beneficiaries choose among plans. However, most of the quality measures relate to customer service and satisfaction more than patient safety and timely access to needed medicines. For 2010, CMS has changed its requirements for plans' medication therapy management programs (MTMPs), which are aimed at enrollees who take many prescription drugs.

Performance metrics for Part D

CMS collects quality and performance data for plan sponsors from several sources—the Consumer Assessment of Health Providers and Systems survey, agency monitoring of plans, and data furnished by sponsors. The agency is also beginning to use claims information as another source.

CMS makes selected performance measures available on the Medicare Prescription Drug Plan Finder at www.medicare.gov to help beneficiaries evaluate their plan options during Part D's annual open enrollment season (Table 5-A4 in the online appendix to this chapter). For 2010, 19 metrics are grouped into four domains:

- drug plan customer service (seven measures);
- member complaints, members who chose to leave, and audit findings (four measures);
- member experience with drug plans (three measures); and
- drug pricing information and patient safety (five measures).

Two measures in the last domain relate to patient safety.²⁴ The first captures elderly members' use of drugs that have a high risk of side effects when there may be safer drug choices.²⁵ The second is a measure of optimal treatment for diabetes patients.²⁶ Other patient safety measures are under review by organizations of stakeholders that focus on quality measurement, such as the Pharmacy Quality Alliance, and CMS may adopt them once they have been validated and endorsed. None of CMS's measures that are currently available captures whether enrollees got their prescribed drug or an alternative therapy without undue delay.

CMS aggregates individual scores for each of the 19 measures on the Plan Finder into a 5-star system based on adjusted percentile rankings of sponsors; 5 stars means excellent performance and 1 star reflects poor performance. CMS presents star ratings that combine individual scores within each domain as well as a

summary ranking that represents overall performance. The distribution of PDP sponsor ratings ranges from 2.5 stars to 4.5 stars, while MA–PD sponsors range between 2.0 stars and 5.0 stars. Generally, LIS enrollees do not tend to be in plans run by sponsors with star ratings that differ systematically from those with more non-LIS enrollees (Figure 5-10, p. 302). Changes in the composition of the measures that CMS uses within its composite score make it difficult to compare plans' performance over time.

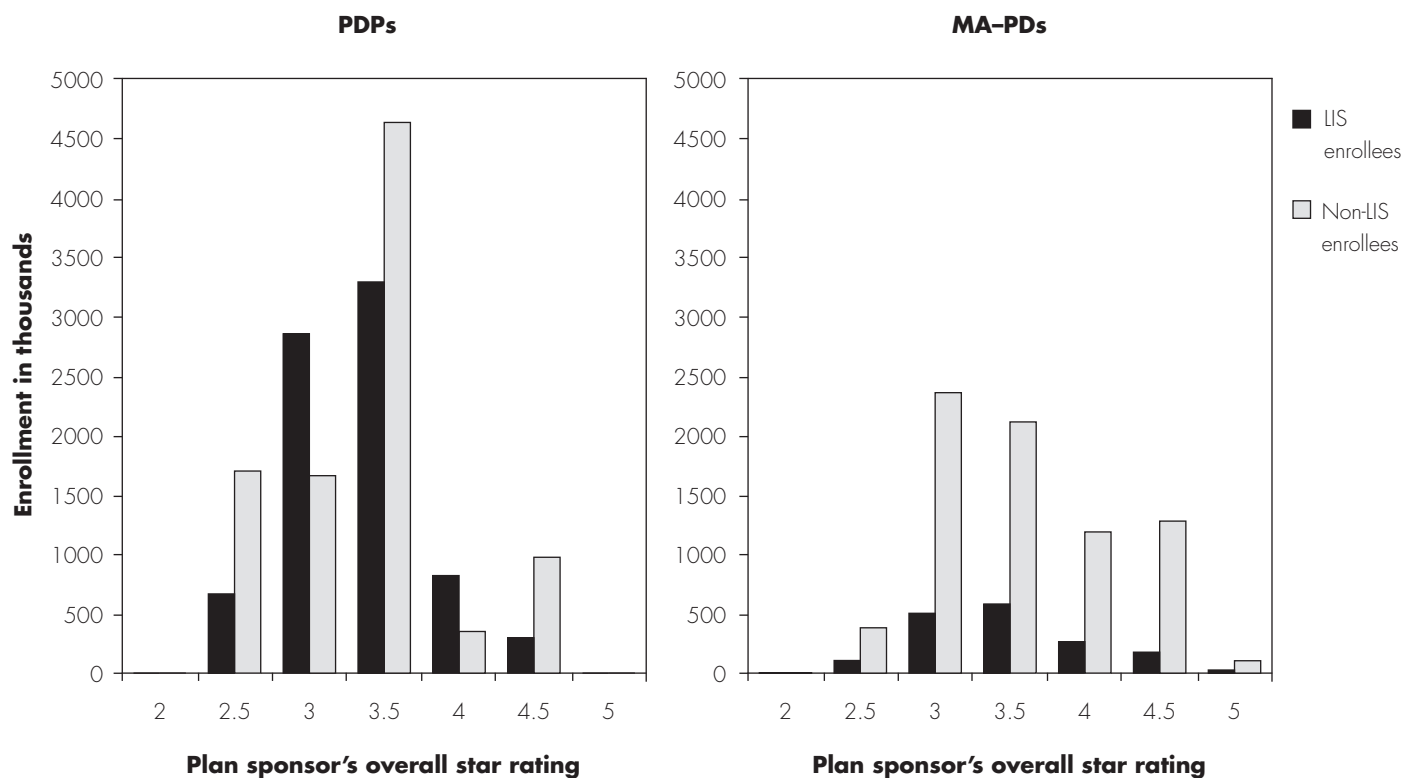
Changes for 2010 to Part D MTMPs

Medicare law requires PDPs and MA–PDs to include programs aimed at improving medication use and reducing adverse events for beneficiaries taking multiple drugs. During the first few years of Part D, sponsors received little guidance on how these MTMPs should be designed. As a result, sponsors' programs differed on many dimensions—the number and type of conditions and prescriptions a beneficiary had to have to be eligible for the program, how beneficiaries were targeted and enrolled, the kinds of interventions provided, and the outcomes measured. Only a small percentage of beneficiaries have enrolled in MTMPs, and sufficient data do not yet exist to determine whether the programs have been increasing the quality of participants' pharmaceutical care (Medicare Payment Advisory Commission 2009b).

On the basis of a review of MTMPs that operated during Part D's first three years, CMS modified plans' requirements for 2010 (Centers for Medicare & Medicaid Services 2009c). Sponsors must target beneficiaries for enrollment at least quarterly and enroll them using an opt-out method only. MTMPs must provide interventions for both providers and enrollees, including an annual comprehensive review of medications in the form of a person-to-person consultation. Sponsors set their own eligibility criteria, but they may not require that beneficiaries have more than three chronic conditions, and the programs must target at least four of seven core chronic conditions.²⁷

Policy issues

Two features of Part D's design are intended to give competing plan sponsors an incentive to manage growth in drug spending and bid low: (1) the prospect of enrollees changing Part D plans voluntarily if premiums grow too high and (2) the opportunity for their plan to be premium-free to LIS enrollees. From the evidence on Part D

**FIGURE
5-10****2009 LIS and non-LIS enrollment by plan sponsors' star ratings**

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Star ratings shown reflect a composite of 19 performance measures, where 1 star means "poor" and 5 stars means "excellent" performance. Sponsor scores are available for the 2010 version of the Medicare Prescription Drug Plan Finder tool available at www.medicare.gov.

Source: MedPAC analysis of CMS Part D performance and enrollment data.

reported for 2010 or the most recent year for which data are available, a number of policy issues emerge.

- Policymakers are ambivalent about beneficiary experiences with plan switching. Year-to-year changes in enrollment are part of the design of Part D: Plans that are able to manage drug spending and bid more competitively are supposed to be rewarded with more enrollment than plans that do not. Some analysts believe that too many LIS enrollees are reassigned each year to a different Part D plan, while others contend that too few non-LIS enrollees switch plans voluntarily. Concerns about LIS reassignees relate primarily to whether the change from one plan's formulary to another affects beneficiaries' adherence to their medicines. Early evidence suggests that there have not been many problems, but the issue needs further research. Concerns about non-LIS enrollees relate to their lack of switching, even in the face of

significant premium increases. Only about 6 percent of Part D enrollees have switched plans voluntarily each year.²⁸ A greater willingness among enrollees to switch plans would make the incentives to bid low more credible to plan sponsors and help to keep growth in beneficiary premiums and program spending in check.

- Several factors related to Part D spending deserve closer attention. One is the LIS, which has become the single largest component of Part D program spending. A related concern is growth in spending for drugs and biologics that have few therapeutic substitutes, some of which are used disproportionately by LIS enrollees. The LIS population tends to be sicker, on average, and access to medications is critically important to help manage their conditions. The extra subsidies for obtaining prescription drugs that Medicare provides to low-income enrollees may help them avoid

exacerbating a medical condition that could otherwise lead to greater disability, greater use of other medical services, and higher Medicare spending. At the same time, fast growth in program spending for Part D's individual reinsurance reflects, in part, the difficulty of negotiating discounts and rebates for higher priced drugs. Also, for some drugs, there is questionable evidence about the appropriateness of therapies for certain beneficiaries. For the future, the Commission may explore ways to encourage greater use of generics and therapeutically equivalent products by LIS enrollees when providers believe it is medically appropriate to do so.

- The Commission is also concerned about the appropriateness and quantity of prescriptions used by beneficiaries. While on average Part D enrollees take three or four medications regularly, a considerable

number take more, sometimes many more. In the past, the Commission has reported that Part D plans' MTMPs were inconsistent across plans and CMS lacked the outcome data needed to assess their effectiveness (Medicare Payment Advisory Commission 2009b). CMS has taken steps to set standards and to require sponsors to report data regularly so that the agency can evaluate MTMPs. Regular reviews of patients' drug regimens may help providers evaluate how well beneficiaries are tolerating multiple medications and adhering to appropriate therapies. We will continue to monitor whether plans' MTMPs are meeting this goal. In addition, the Commission may consider ways to shore up evidence on the effectiveness of drug and biological therapies for elderly patients and for beneficiaries with multiple comorbidities. ■

Endnotes

- 1 The share of Medicare beneficiaries enrolled in Part D plans grew slightly from the time the program began in 2006 to 2009, from 55 percent to 59 percent. Expanded enrollment in MA–PDs accounts for most of the growth.
- 2 If an employer agrees to provide primary drug coverage to its retirees with an average benefit value that is equal to or greater than Part D (called creditable coverage), Medicare provides the employer with a tax-free subsidy for 28 percent of each eligible individual’s drug costs that fall within a specified range of spending.
- 3 Specifically, SSA no longer considers the cash value of life insurance policies when evaluating assets, nor does it count assistance provided by others for household expenses as income.
- 4 Medicare allows insurers to offer two types of plans that have the same average benefit value as the defined standard benefit. The first type, which CMS calls actuarially equivalent, uses the same deductible as the defined standard benefit but has different cost sharing during the plan’s initial coverage phase. The second type, called basic alternative, allows insurers to use a lower deductible than the defined standard benefit, different cost sharing, and a modified initial coverage limit. Because they have the same average benefit value as the defined standard benefit, in this chapter we refer to both types as actuarially equivalent benefits.
- 5 Sponsors can enhance benefits in other ways as well—for example, covering drugs not allowed under basic Part D benefits, such as weight-loss medications and over-the-counter products. In the first few years of Part D, a handful of PDP sponsors offered products that covered some brand-name and generic drugs in the coverage gap. However, those plans attracted beneficiaries with relatively high drug spending and the plans experienced financial losses. In the following years, nearly all affected sponsors withdrew those products from the market.
- 6 The reduced numbers of PDPs reflect in part the continuing effects of consolidation among plan sponsors. For example, UnitedHealthcare and PacifiCare merged in 2006. Under CMS guidance, the organization was required to reduce its combined number of plans over a three-year period. Similarly, Universal American acquired MemberHealth in 2007.
- 7 Consider, for example, the case of paroxetine, an antidepressant also known under the brand-name Paxil®. Antidepressants are one of six protected therapeutic classes in which plans must cover all or substantially all drugs. By conducting the analysis at the level of chemical entities, plans are credited with including paroxetine on their formulary when they list the generic version (paroxetine hydrochloride), even if they do not list Paxil, the continuous release version Paxil CR®, or the brand-name drug Pexeva® (paroxetine mesylate) manufactured by a different company.
- 8 For purposes of this analysis, our contractor grouped plan-designated tiers into analytical tiers that were comparable to each other. For example, a plan might have two tiers that use 25 percent coinsurance each within their formulary. Since their cost sharing is the same, our analysis would combine these tiers into one group.
- 9 For 2006, CMS did not set criteria for placing drugs in a specialty tier. However, for 2007, CMS defined specialty tiers more clearly: Only Part D drugs with negotiated prices that exceeded \$500 per month could be in a specialty tier. Since 2008, only drugs with prices that exceed \$600 per month may be in a specialty tier.
- 10 The most common variations are plans that use one generic tier and one tier for brand-name drugs (i.e., they do not distinguish between preferred and nonpreferred brands), plans that use two generic tiers (e.g., value generics and nonpreferred generics at higher cost sharing), plans that use three tiers for brand-name drugs (e.g., they include a “value brand” tier with lower cost sharing than preferred brands), and plans with a separate tier for nonspecialty injectable drugs.
- 11 Prior authorization refers to requirements for preapproval from a plan before coverage. Quantity limits refer to a plan limiting the number of doses of a particular drug covered in a given time period. Under step therapy, plans require the enrollee to try specified drugs before moving to other drugs.
- 12 The MA–PD value here excludes SNPs, which are made up primarily of enrollees with certain characteristics in common, such as being dually eligible for Medicare and Medicaid, residing in a long-term care facility, or having a specified chronic condition. Enrollees in SNPs tend to have much tighter formularies than beneficiaries in PDPs or MA–PDs. In 2010, the average SNP enrollee’s plan lists 75 percent of all reportable chemical entities.
- 13 For 2010, CMS introduced a new reference file that defines the set of drugs for which sponsors must report on plan coverage. Although results for 2010 formularies are not strictly comparable to those in prior years, the change does not significantly affect the findings.
- 14 In 2007 and 2008, CMS used its general demonstration authority to phase in a weighting system based on each plan’s total enrollment. Under the same demonstration, CMS carried out a “de minimus” policy: Plans with premiums within \$1

- or \$2 of their regional threshold remained premium-free to LIS enrollees, but those plans were ineligible to receive newly assigned enrollees. CMS discontinued the demonstration in 2009.
- 15 Most LIS enrollees pay no premiums, but those with incomes between 135 percent and 150 percent of the federal poverty level pay a portion of their plan's premium.
 - 16 Specifically, CMS began weighting plan premiums by their numbers of LIS enrollees rather than by plans' total enrollment. A reason for this approach was concern that, in areas where MA-PDs hold large shares of enrollment, the ability of MA-PDs to reduce their drug premiums with "rebate dollars" from the MA payment system would lead to lower regional thresholds and fewer PDPs with premiums below those thresholds. On average, MA-PDs have fewer LIS enrollees than PDPs and PDPs tend to have higher premiums; thus, the hope was that weighting premiums by LIS enrollment would tend to raise regional thresholds. However, the relative influence of MA-PD plans varies around the country. For example, more than half of Arizona beneficiaries who receive the LIS are enrolled in MA-PDs, compared with just 2 percent in the Maine-New Hampshire region. In approximately nine PDP regions, 20 percent or more of LIS recipients are enrolled in MA-PDs.
 - 17 Direct subsidy payments for LIS enrollees are risk adjusted to reflect their higher average drug spending.
 - 18 Exceptions include plan sponsors that own and operate their own pharmacies.
 - 19 A provision of the Medicare Improvements for Patients and Providers Act of 2008 requires CMS to codify and, if appropriate, increase the number of protected classes. CMS is working on this process and some groups have requested inclusion of additional drug classes. For example, one manufacturer has suggested that drugs used to treat multiple sclerosis be considered a protected category.
 - 20 Sponsors may, however, use prior authorization for protected-class drugs to establish whether Part B or Part D should pay for the drug.
 - 21 By individual NDC, we mean prices across the exact same code that identifies the drug's labeler, drug, dosage form, strength, and package size. Because each specific drug often is available in different dosages, strengths, and package sizes, the same drug typically has many different NDCs.
 - 22 For this index, Acumen grouped NDCs that are pharmaceutically identical, aggregating prices across trade drug names, manufacturers, and package sizes. As a result, brand-name drugs are grouped with their generics if they exist, and the median price more closely reflects the degree to which market share has moved between the two.
 - 23 Sponsors must limit cost sharing for specialty-tier drugs to no more than 25 percent of the negotiated price within the benefit's initial coverage limit. However, they may use higher coinsurance to help maintain actuarial equivalence to basic benefits—for example, in a basic plan that has no deductible or in one with a deductible that is lower than the defined standard benefit's deductible.
 - 24 Other Part D performance measures are available but not on the Plan Finder. For example, each sponsor's generic dispensing rate is shown on the agency's website. Similarly, CMS posts other measures to its site that are still under development, are duplicative, or are limited by a small sample size. Among them, two are related to patient safety: a measure of drug-drug interactions and another of diabetes medication dosing. At CMS's Patient Safety Analysis website, which is available only to CMS and plan sponsors, sponsors can track their patient safety measures monthly and get more detailed information.
 - 25 This measure calculates the percentage of Part D enrollees age 65 or older who filled at least one prescription for a drug with a high risk of serious side effects in the elderly. The measure was first developed by the National Committee for Quality Assurance through its Healthcare Effectiveness Data and Information Set and then adapted and endorsed by the Pharmacy Quality Alliance.
 - 26 This measure evaluates whether patients who are under treatment for diabetes (identified by claims for insulin or oral antidiabetic medicines) and who receive an antihypertensive medication also receive an angiotensin-converting enzyme inhibitor or an angiotensin receptor blocker medication.
 - 27 Core chronic conditions include hypertension, heart failure, diabetes, dyslipidemia, respiratory diseases, bone disease and arthritis, and mental health. Sponsors cannot set the use of more than eight Part D drugs as a criterion for eligibility. For 2010, CMS also lowered the dollar threshold of expected drug costs that sponsors use as another eligibility criterion from \$4,000 to \$3,000 and expanded plans' reporting requirements. For each enrollee in the plan's MTMP, sponsors must report the number of medication reviews completed, the number of prescriber interventions, and any resulting changes in therapy. The agency and its contractors will monitor and evaluate plans' MTMPs.
 - 28 This proportion is similar to that in the Federal Employees Health Benefits (FEHB) program. However, unlike in FEHB, the decision to switch Part D plans does not affect the physician providers that the enrollee may see.

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C H A P T E R

6

**Report on comparing
quality among Medicare
Advantage plans and between
Medicare Advantage and
fee-for-service Medicare**

R E C O M M E N D A T I O N S

- 6-1** The Secretary should define electronic health record “meaningful use” criteria such that all qualifying electronic health records can collect and report the data needed to compute a comprehensive set of process and outcome measures consistent with these recommendations. Qualifying electronic health records should have the capacity to include and report patient demographic data such as race, ethnicity, and language preference.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-2** The Secretary should collect, calculate, and report quality measurement results in Medicare Advantage at the level of the geographic units the Commission has recommended for Medicare Advantage payments, and calculate fee-for-service quality results for purposes of comparing Medicare Advantage and fee-for-service using the same geographic units.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-3** The Secretary should have all health plan types in Medicare Advantage report on the same basis, including reporting measures based on medical record review, and the Congress should remove the statutory exceptions for preferred provider organizations and private fee-for-service plans with respect to such reporting.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-4** The Secretary should collect and report the same survey-based data that are collected in Medicare Advantage through the Health Outcomes Survey for the Medicare fee-for-service population, unless the Secretary determines that such data cannot meaningfully differentiate quality among Medicare Advantage plans and between fee-for-service and Medicare Advantage.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-5** The Secretary should expeditiously publish specifications for forthcoming Medicare Advantage plan encounter data submissions to obtain the data needed to calculate patient outcome measures.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-6** The Secretary should calculate fee-for-service results for Healthcare Effectiveness Data and Information Set administrative-only measures for those measures the Secretary determines can provide a valid comparison of the two sectors.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-7** The Secretary should develop and report on additional quality measures for Medicare Advantage plan and Medicare Advantage-to-fee-for-service comparisons that address gaps in current quality measures.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

- 6-8** The Congress should provide the Secretary with sufficient resources to implement the Commission’s recommendations in this report.

.....
COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

Report on comparing quality among Medicare Advantage plans and between Medicare Advantage and fee-for-service Medicare

Chapter summary

In recent years, the Commission has made a number of recommendations on quality reporting and quality-related payment adjustments in both the Medicare Advantage (MA) and traditional Medicare fee-for-service (FFS) programs. In response to a congressional mandate, this chapter contains additional recommendations on quality measurement and reporting in Medicare. Specifically, Section 168 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) requires the Commission to submit a report to the Congress by March 31, 2010, about measures for comparing quality and patient experience in the MA and FFS programs, with the goal of collecting and reporting such measures by the year 2011. MIPPA requires that the report:

- address methods for comparing quality among MA plans as well as between the MA and FFS programs,
- address issues in public reporting and benchmarking, and
- include recommendations for legislative or administrative changes as the Commission finds appropriate.

Any changes the Commission recommends in March 2010 would have to be implemented immediately for collection and reporting of measures in 2011. CMS, health plans, and other involved entities need as much lead time as possible to implement changes and be prepared for data collection

In this chapter

- Introduction: Quality measurement and reporting
- Recommendations
- Conclusion: A set of recommendations to improve quality comparisons

and reporting in that one-year time frame. Thus, we have taken an incremental approach, building on current measurement systems and data sources to improve quality comparisons in the short term—by 2011. For the longer term—that is, by 2013 and beyond—we recommend ways to expand current quality measurement and reporting systems where appropriate and to fill in gaps in the current measurement sets, including the use of outcome measures to compare MA and FFS in local geographic areas. We also recommend leveraging the capabilities and increased use of health information technology, which will be supported by Medicare payment incentives beginning in 2011, to facilitate improvements in quality measurement.

Medicare currently uses three systems to measure and compare quality across MA plans and track changes over time:

- Healthcare Effectiveness Data and Information Set (HEDIS[®]), which measures clinical processes and intermediate clinical outcomes;
- Consumer Assessment of Healthcare Providers and Systems (CAHPS[®]), which primarily measures patients' experiences of care delivered through their plans and providers; and
- Health Outcomes Survey (HOS), which measures changes in beneficiaries' self-reported physical and mental health status over time.

Are comparable data sources and measures available for the FFS program? The MA CAHPS survey has the most direct analogue in the FFS CAHPS survey, which CMS currently fields to a sample of beneficiaries in FFS Medicare. A limited number of HEDIS measures used in MA are also used to compute quality measures in FFS Medicare, and some of the HOS survey questions have been fielded as a component of the FFS CAHPS survey.

On the basis of our findings, the Commission makes eight recommendations. They address the use of electronic health records, the geographic unit of analysis for quality comparisons, uniformity in quality data reporting requirements, comprehensiveness of quality measures, and the issue of whether there are sufficient dedicated resources for CMS. Although the resources required to implement these recommendations are likely to be substantial, we believe it is important to beneficiaries, providers, and policymakers that comparisons on quality be as accurate and reliable as possible. The unintended consequences of incomplete or flawed comparisons would be detrimental to the goal of improving quality across Medicare. ■

MIPPA Section 168

SEC. 168. MEDPAC STUDY AND REPORT ON QUALITY MEASURES.

(a) STUDY.—The Medicare Payment Advisory Commission shall conduct a study on how comparable measures of quality and patient experience can be collected and reported by 2011 for the Medicare Advantage program under part C of title XVIII of the Social Security Act and the original Medicare fee-for-service program under parts A and B of such title. Such study shall address technical issues, such as data requirements, in addition to issues relating to appropriate quality benchmarks that— (1) compare the quality of care Medicare

beneficiaries receive across Medicare Advantage plans; and (2) compare the quality of care Medicare beneficiaries receive under Medicare Advantage plans and under the original Medicare fee-for-service program.

(b) REPORT.—Not later than March 31, 2010, the Medicare Payment Advisory Commission shall submit to Congress a report containing the results of the study conducted under subsection (a), together with recommendations for such legislation and administrative action as the Medicare Payment Advisory Commission determines appropriate. ■

Introduction: Quality measurement and reporting

The Commission has long been interested in health care quality reporting and in creating links between Medicare provider payments and quality performance. We have made a number of recommendations on quality reporting and quality-related payment adjustments in both the Medicare Advantage (MA) and traditional Medicare fee-for-service (FFS) programs. Section 168 of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) mandates that the Commission examine existing quality measures and make further recommendations.

The MIPPA mandate

Section 168 of MIPPA requires the Commission to submit a report to the Congress by March 31, 2010, about measures for comparing quality and patient experience in MA with the traditional FFS program, with the goal of collecting and reporting such measures by 2011 (see text box). The report should address ways to compare quality among MA plans as well as between MA and FFS, examine issues in reporting and benchmarking, and include recommendations for needed legislative or administrative changes.¹

Previous Commission recommendations

The Commission has been concerned for many years that the Medicare program pays MA plans and providers in the

FFS program without regard to the quality of the care that is provided. We have made a series of recommendations to allow the program to differentiate payments based on quality measures.

One potential use for the information on quality is in connection with pay-for-performance (P4P) systems that reward higher or improved quality. The Commission has recommended P4P for many of Medicare's payment systems, including MA, along with recommendations that would facilitate an MA-to-FFS comparison. Specifically, the Commission has recommended that:

- The Congress should establish a quality incentive payment policy for all MA plans and that CMS implement an incentive program to reward higher quality plans. Under this policy, CMS would create a reward pool from a small percentage of plan payments and redistribute it based on plans' performance attainment and improvement on quality indicators (Medicare Payment Advisory Commission 2004).
- CMS should require providers who perform laboratory tests to submit laboratory values, using common vocabulary standards (Medicare Payment Advisory Commission 2005a).
- The Secretary should calculate clinical quality measures for the FFS program that would permit CMS to compare FFS with MA (Medicare Payment Advisory Commission 2005b).

- The Congress should set the MA benchmark payment amounts that CMS uses to evaluate plan bids at 100 percent of FFS costs and redirect Medicare's share of savings from bids below the benchmarks to a fund that would redistribute the savings to MA plans on the basis of quality measures (Medicare Payment Advisory Commission 2005b).
- The Congress should change the current county-based MA payment areas to metropolitan statistical areas (as long as they do not cross state boundaries) and National Center for Health Statistics health service areas for a state's nonmetropolitan areas (Medicare Payment Advisory Commission 2005b).

In addition to these recommendations, the Commission noted in its June 2009 report that, during a transition period in which MA plan payments would fall as benchmarks were reduced from their current high levels (in relation to FFS), higher quality plans should receive higher payments than other plans. After the transition, if plans demonstrated that their quality was better than FFS, they could receive payment rates that were higher than FFS (Medicare Payment Advisory Commission 2009b).

In this chapter, we build on those recommendations and, consistent with the MIPPA mandate, focus on comparing quality of care among MA plans and between MA and FFS. We seek to accomplish three goals:

- enable CMS to better manage the Medicare program,
- provide a basis for differentiating payments based on quality, and
- provide beneficiaries with better information for making more informed choices among the MA plans and the FFS program.

Process and outcome measures for assessing quality

The metrics for assessing health care quality include process, intermediate outcome, and outcome (including patient experience) measures. In fulfilling the MIPPA mandate, we sought to identify those measures that can be clearly defined, practically collected, and meaningfully interpreted, taking into account the strengths and weaknesses of each kind of measure.

Process measures often focus on a single dimension of care for a specific condition—for example, the share of patients with a diagnosis of diabetes who received at least

one blood glucose test in the measurement year. Process measures assess whether a specific test, treatment, or other intervention was delivered to patients for whom the process is indicated. Process measures can be relatively straightforward to define and measure in that information can be obtained from administrative data sets such as claims; both MA plans and CMS have experience using them.

Intermediate outcome measures indicate whether patients diagnosed with a particular chronic condition such as diabetes or hypertension are achieving improvement of a specific abnormal physiologic function (e.g., blood glucose or blood pressure) attributable to their condition. Intermediate outcome measures rely on actual test results to evaluate whether specific clinical treatment objectives were achieved, such as the percentage of diabetes patients who had low-density lipoprotein cholesterol levels below a specified target value during the measurement period. Although these indicators do not capture the end results of care, they can be important ongoing indicators of whether treatment for a specific condition is being prescribed by providers and adhered to by patients.

Outcome measures reflect the result of care, from either a clinical or a patient-centered perspective (Institute of Medicine 2006). Several types of outcomes are used as quality indicators, including mortality rates, hospital admission and readmission rates, and patient-centered measures, such as surveys of patients' experiences with the health care system or their self-perceived health status (Institute of Medicine 2006, National Quality Forum 2009). Outcome measures such as mortality and readmission rates provide an integrated assessment of quality because they reflect the result of multiple care processes provided by all health care providers involved in the patient's care. They also focus attention on much-needed system-level improvements, because achieving the best patient outcomes often requires carefully designed care processes, teamwork, and coordinated action on the part of many providers (National Quality Forum 2009). Patient experience measures are inherently subjective by nature, but they capture an important patient-centered dimension of quality not available elsewhere (Medicare Payment Advisory Commission 2004).

Near-term and long-term feasibility of quality measures

The MIPPA provision specifies a very short time between the March 2010 publication of this report and the initial

reporting of improved measures in 2011. From a practical point of view, any changes the Commission recommends would have to be implemented immediately to meet the 2011 time frame. CMS, health plans, and other involved entities will need lead time to implement data collection changes on services rendered in 2010 for measure reporting in 2011. To the extent that implementing a recommendation requires aggregating quality indicators based on currently collected data, those results could be reported in 2011. In contrast, for recommendations that involve a change in the data collection processes of MA plans during the course of the year (e.g., requiring the collection of new data and therefore incurring new costs that had not been anticipated in MA plan bids), data collection could begin in 2011 but reporting would not be possible until 2012.²

For the longer term—that is, by 2013 and beyond—we recommend ways to expand current quality measurement and reporting systems and to fill in gaps in the current measurement sets, including using MA plan encounter data and FFS claims data to calculate and compare outcome measures—such as hospital admission rates, readmission rates, and mortality rates—for MA plans and the local FFS Medicare beneficiary population. We also recommend leveraging the capabilities and increased use of health information technology (HIT), which will be supported by Medicare payment incentives beginning in 2011, to facilitate improvements in quality measurement in both MA and FFS Medicare.

We considered a variety of quality measures that would enable comparisons of quality among plans and between programs. We sort current measures by their use in MA and FFS and examine additional measures that would be useful but feasibly could be implemented only in the longer term. (A more detailed description of quality measurement systems used in MA is provided in the online appendix to this chapter at <http://www.medpac.gov>.)

Quality measurement systems used in Medicare Advantage

CMS uses three systems in MA to measure and compare quality across plans. The cost of each system is primarily borne by MA plans. The systems are:

- **Healthcare Effectiveness Data and Information Set (HEDIS®)**³—HEDIS measures are based on administrative data, such as claims and encounter

data, supplemented with clinical data extracted from medical records for certain measures. HEDIS measures are either process or intermediate outcome measures. HEDIS is maintained by the private, not-for-profit National Committee for Quality Assurance (NCQA) and is used for Medicare, Medicaid, and many commercial health plans. NCQA works with CMS to adapt HEDIS measures to the Medicare population. MA plans have been reporting selected HEDIS measures since 1997. NCQA has also worked with CMS to take the plan-level HEDIS metrics and apply them at the physician practice level.

- **Consumer Assessment of Healthcare Providers and Systems (CAHPS®)**—CAHPS is a set of patient experience surveys administered to Medicare beneficiaries in both MA and FFS. CAHPS provides information on respondents' personal experiences interacting with their health plan and health care providers. CAHPS results are used to measure quality from the patient's perspective across six domains: quick access to care of any type, access to needed care without delays, effectiveness of physician communication, health plan information and customer service, overall rating of health care quality, and overall rating of health plan quality. CAHPS was developed by the Agency for Healthcare Research and Quality (AHRQ) and the MA version was first fielded in 1997. Components of the CAHPS survey are included in HEDIS reporting. CMS also fields a version of CAHPS in FFS Medicare. Many researchers have used CAHPS to compare quality between MA and Medicare FFS (e.g., Keenan et al. 2009, Landon et al. 2004).
- **Health Outcomes Survey (HOS)**—HOS is a longitudinal survey of self-reported health status among MA plan enrollees over a two-year period. For each MA plan, randomly selected enrollees are surveyed in a given year and then resurveyed two years later about perceived changes in their physical and mental health. The beneficiaries' physical and mental health status is categorized as better, the same, or worse than expected, based on a predictive model that takes into account risk adjustment factors to determine expected results. When results are reported, a plan is deemed to have better or poorer outcomes if the plan's results on the physical or mental health measures are significantly different from the national average across all plans. (Components of HOS results are included in HEDIS reporting.)

Quality measurement systems currently used in fee-for-service Medicare

CMS currently measures and compares quality in several fee-for-service payment systems, including inpatient hospitals and outpatient hospital departments, physicians and other eligible professionals, skilled nursing facilities, home health agencies, and dialysis facilities.

Inpatient hospitals. Hospitals that are paid under the inpatient prospective payment system (IPPS) have a financial incentive to participate in the Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) program. The Congress has authorized CMS to reduce the annual IPPS market basket update by 2 percentage points for any eligible hospital that does not successfully report the annually designated quality measures. In fiscal year 2007, nearly 95 percent of eligible hospitals participated successfully in the reporting program (Centers for Medicare & Medicaid Services 2008b).

The RHQDAPU program included 30 performance measures in fiscal year 2009 and includes 42 in fiscal year 2010. Almost all the process measures require medical record data abstraction by participating hospitals, including treatment of acute myocardial infarction (AMI), heart failure (HF), and pneumonia; surgical care improvement; patient safety; and nursing-sensitive care. Patient experience measures are based on data collected by hospitals through the Hospital Consumer Assessment of Healthcare Providers and Systems (H-CAHPS®) patient survey. These data

include information about all patients served by the hospital, regardless of payer. For the RHQDAPU outcome measures (e.g., mortality and readmission rates for selected conditions), hospitals do not have to report data to CMS; instead, CMS calculates these measures with Medicare claims data. Outcome measures calculated by CMS include in-hospital and 30-day postdischarge mortality and complication rates for selected conditions and procedures, as well as 30-day readmission rates for patients with HF. Most hospital quality measures gathered through the RHQDAPU program are published on the Hospital Compare website (www.hospitalcompare.hhs.gov).

Hospital outpatient departments. In the Tax Relief and Health Care Act of 2006 (TRHCA), the Congress required CMS to establish a quality data reporting program for hospital outpatient care. Similar to the inpatient quality data reporting program, hospitals that fail to report on the designated outpatient quality measures incur a reduction of 2 percentage points in their annual outpatient prospective payment system payment rate update. In fiscal year 2009, the Hospital Outpatient Quality Data Reporting Program had 11 measures, including 5 measures related to care for patients with AMI, 2 related to preventing surgical infection, and 4 related to use of certain imaging procedures.

Physicians and other professionals. In TRHCA, the Congress authorized CMS to establish the Physician

(continued next page)

CMS recently began requiring MA special needs plans (SNPs) to report on a set of quality measures that apply only to plans of this type.⁴ These “SNP-only measures” include:

- Five measures reported through HEDIS—advanced care planning, functional status assessment, medication review, pain screening, and medication reconciliation postdischarge (Centers for Medicare & Medicaid Services 2009a).⁵
- Six structural measures (i.e., measures of whether a plan has implemented policies and procedures to achieve specified goals)—complex case management, improving member satisfaction, clinical quality improvements, care transitions, relationship with member’s nursing facility (institutional SNPs only), and coordination of Medicare and Medicaid benefits (dual eligible SNPs only) (National Committee for Quality Assurance 2009c).

Quality measurement systems currently used in fee-for-service Medicare

Quality Reporting Initiative (PQRI), which establishes a financial incentive for eligible professionals to participate in a voluntary quality reporting program. In 2009, eligible professionals who successfully met PQRI reporting requirements received a bonus payment equal to 2 percent of their total allowed charges for covered services payable under the Medicare physician fee schedule during the reporting period.

CMS does not publish PQRI results for individual physicians or physician groups but makes the results available to each physician or group. However, the Medicare Improvements for Patients and Providers Act of 2008 requires CMS to publish on the www.medicare.gov website the names of the physicians and group practices that satisfactorily submitted data on quality measures under PQRI.

Skilled nursing facilities and home health agencies.

In 1999–2000, CMS required skilled nursing facilities (SNFs) and home health agencies (HHAs) to begin routinely collecting and submitting patient assessment data as a condition of participation in Medicare. The patient assessment instrument used to collect and report performance data by SNFs is the Minimum Data Set (MDS), and the corresponding instrument for HHAs is the Outcome and Assessment Information Set (OASIS). In 2002–2003, CMS used its existing statutory authority to publish on its website the SNF and HHA quality measures that CMS calculated from submitted MDS and OASIS data. These measures do not require SNFs or HHAs to submit any information beyond

what they must submit through their respective patient assessment instruments. The SNF measures report on various quality indicators associated with common clinical conditions among SNF patients and how well SNFs help their patients regain or maintain their ability to function. Similarly, the HHA measures indicate how well HHAs help their patients regain or maintain their ability to function by using indicators of physical health status and how well people can perform activities of daily living, as well as utilization measures, such as hospital admissions and use of emergent care.

Dialysis facilities. CMS currently uses 22 measures to monitor the quality of care delivered to patients with end-stage renal disease (ESRD). The topic areas for these measures are anemia, dialysis adequacy, vascular access, mineral metabolism, influenza vaccination, mortality, and patient education, satisfaction, and quality of life. Currently, public reporting is limited to three measures—hematocrit level, urea reduction ratio, and mortality—that are available for 100 percent of the ESRD population. Data on other measures are collected from a 5 percent random sampling of the ESRD population. In October 2008, CMS implemented new conditions for coverage that all Medicare-participating dialysis providers must meet. The new conditions require that all dialysis facilities electronically submit their patients' clinical information to CMS via a web-based software application (CROWNWeb). According to CMS, CROWNWeb will allow the agency to publicly report more current quality data on the full set of ESRD quality measures. ■

Quality measurement in FFS Medicare

CMS currently uses a variety of quality measures to publicly report and track performance of the following types of FFS providers: inpatient hospitals, outpatient hospital departments, physicians and other eligible professionals, skilled nursing facilities, home health agencies, and dialysis facilities (Centers for Medicare & Medicaid Services 2009c) (see text box).⁶ An important distinction between the quality measurement approach Medicare uses for MA and FFS is that quality in FFS Medicare is measured at the individual provider level, whereas quality in MA is measured at the plan level.

Additional quality measures considered

We examined additional measures that could be used to compare quality among MA plans and between MA and FFS. Some of these measures are beginning to be implemented by CMS and others will be more feasible in the future as new data sources become available, such as encounter data from MA plans and clinical data from electronic health records (EHRs). Some, but not all, of the measures described in this section have been endorsed by a multistakeholder consensus-based quality measurement entity such as the National Quality Forum. Nonetheless, the Commission intends that this report consider a wide

variety of approaches for improving quality measurement in MA and FFS Medicare, including measures that have strong research underpinnings and that will become more feasible to implement as clinical data become more readily captured and easily retrieved for quality measurement with the widespread use of EHRs.

Assessing Care of Vulnerable Elderly indicators The Assessing Care of Vulnerable Elders (ACOVE) project is a collaborative effort between RAND Health and Pfizer, Inc., to develop a set of quality indicators for the medical care provided to “vulnerable elders.” This term was defined by the measure developers as community-dwelling individuals age 65 or older who have a relatively high near-term risk of death or functional decline (as assessed with a short standardized patient survey) and all patients aged 75 or older (Wenger et al. 2007). The most recent version of the measure set, ACOVE–3, contains 392 quality indicators covering 14 types of care processes and 4 domains of care: screening and prevention, diagnosis, treatment, and follow-up and continuity of care. Stakeholders with whom the Commission staff consulted and who were familiar with the ACOVE measures generally considered them superior measures for the target population. At the same time these experts thought the ACOVE measures were currently not feasible to implement on a wide scale, given their reliance on medical record data. However, most, if not all, of the information necessary to calculate the ACOVE measures could be efficiently extracted from EHRs if they were designed to capture and report the required data elements. We also note that the ACOVE measures are designed to apply specifically to patients age 65 or older (all of them have been validated for patients age 75 or older), and therefore they likely would not be appropriate for measuring the quality of care for Medicare beneficiaries under age 65.

Hospital readmission rates In its June 2007 report, the Commission discussed at length how hospital readmissions sometimes indicate poor care or missed opportunities to better coordinate care (Medicare Payment Advisory Commission 2007). CMS now uses Medicare claims data to calculate hospital-level 30-day risk-standardized readmission rates for 3 conditions: heart failure, acute myocardial infarction, and pneumonia. Hospitals do not need to report additional data for CMS to calculate these readmission rates. CMS began publishing hospital-level readmission rates for the three selected conditions on the Hospital Compare website in June 2009, and the agency plans to update them quarterly. Thirty-day readmission rates also are being tracked and used as

a quality measure in the Medicare Acute Care Episode demonstration, in which hospitals and physicians in certain communities form a single accountable entity that accepts a bundled payment for designated orthopedic and cardiac procedures. CMS currently does not gather MA plan encounter data that would enable the calculation of readmission rates for MA plans, either at the aggregate sector level (i.e., across all plans) or at the individual plan or contract level.

Hospital admission rates for ambulatory care sensitive conditions The Agency for Healthcare Research and Quality (AHRQ) has developed a set of prevention quality indicators (PQIs) that are outcome measures designed to calculate rates of potentially preventable hospitalizations for specific ambulatory care sensitive conditions (ACSCs) in a given geographic area or population (such as enrollees in a health plan). ACSCs include conditions such as diabetes, congestive heart failure (CHF), and chronic obstructive pulmonary disease, for which high-quality outpatient care can prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease (Agency for Healthcare Research and Quality 2007b). For those PQIs that are appropriate for the Medicare population, CMS could calculate them for Medicare FFS in a given geographic area with data from the Medicare Provider Analysis and Review (MedPAR) files that the agency compiles annually. CMS could also calculate PQIs for MA plans that submitted encounter data with the same data elements in the same level of detail as MedPAR files.⁷

Potentially preventable emergency department visits Researchers at the New York University Center for Health and Public Service Research have developed an algorithm for classifying emergency department (ED) visit data in four basic categories of use:

- nonemergent—cases in which immediate care is not required within 12 hours;
- emergent—primary care treatable—cases in which care is needed within 12 hours but could be provided in a typical primary care setting;
- emergent—ED care needed: preventable or avoidable—cases in which immediate care in an ED setting is needed for a condition that could have been prevented or avoided with timely and effective ambulatory care; and

- emergent—ED care needed: not preventable or avoidable—cases in which immediate care in an ED setting is needed for a condition that could not have been prevented or avoided with ambulatory care.

The algorithm also identifies visits with a primary diagnosis involving mental health, substance abuse, or injury (Billings 2003). The algorithm is designed to be used with administrative data sources, such as ED discharge data.⁸

Mortality rates AHRQ has developed and maintains a set of inpatient quality indicators (IQIs) that can be used with hospital inpatient discharge data (such as the information CMS currently collects for all FFS Medicare hospitalizations) to calculate mortality rates for certain conditions and medical procedures at the level of individual hospitals. These measures apply to inpatient conditions for which mortality rates have been shown to vary substantially across institutions and for which evidence associates high mortality with deficiencies in the quality of care (Agency for Healthcare Research and Quality 2007a). The current set of IQIs includes mortality rates for acute myocardial infarction, CHF, stroke, gastrointestinal hemorrhage, hip fracture, and pneumonia. These measures can be aggregated from the hospital level to geographic areas or health plans. To maximize the extent to which the IQIs reflect quality across a system of care (either among FFS providers in a geographic area or within an MA plan), Medicare could calculate mortality rates within 30 days of hospital discharge for patients with the specified conditions. As with the other outcome measures discussed in this section, the lack of MA plan encounter data means that CMS cannot calculate these measures for MA plans or the MA sector as a whole.

Burden of quality measurement and cost to CMS

Additional quality data collection and reporting represent an administrative burden on plans and providers that, while manageable, needs to be acknowledged. Plans already collect and report many quality measures. Some of the recommendations of this report involve minimal burden, consisting of a different manner of reporting or aggregating data that are already being collected. New sources of information, consisting of data collected primarily for purposes other than quality monitoring, can be the source of quality measurement with minimal additional burden to plans and providers. For example, CMS already intends to collect encounter data from MA

plans, from which it could calculate outcome measures, such as readmission and mortality rates, in ways that are comparable to outcome measures calculated from FFS claims data.

A greater level of burden arises when a measure requires more depth (e.g., needing to review medical records) or more breadth (e.g., needing to survey more beneficiaries to obtain a statistically sufficient sample size). Medical record review is an expensive and labor-intensive process for paper-based medical records. The burden of medical record review on plans and providers increases if the number of geographic reporting units is expanded, if more measures are developed that require medical record review, and if more plan types are asked to report on measures requiring medical record review. The burden would extend to providers not under contract to a health plan if preferred provider organizations (PPOs) and private fee-for-service (PFFS) plans are asked to report on care rendered by non-network providers.

The Commission recognizes the additional burden incurred by plans, providers, and beneficiaries associated with the recommendations in this report. Nevertheless, the effort is needed to ensure comparability of measures across MA plans and to provide a more complete picture of the quality of care beneficiaries receive in MA and FFS. Similarly, we recognize that the efforts to improve and extend the collection of quality information will require substantially more administrative resources for CMS, but these efforts are critical to making appropriate comparisons across plans and programs. The unintended consequences of inaccurate quality comparisons would be detrimental to policymakers, providers, and beneficiaries. With each of the recommendations made in this chapter, we identify their cost implications and we support a policy of designated funding for those efforts that would incur additional costs. The Commission does not typically estimate the impact of its recommendations on Medicare's administrative costs, but in this case we believe it is important to indicate the directional impact on Medicare administrative costs for our recommendations to emphasize the importance of CMS having adequate resources to carry them out.

Recommendations

As part of the MIPPA mandate, the Congress directed the Commission to make recommendations for legislative

**TABLE
6-1**

Roadmap of recommendations

Year	MA-to-MA comparison	MA-to-FFS comparison
2009–2010	6-1: Define EHR “meaningful use” to include data collection and reporting needed for comprehensive set of process and outcome measures with robust risk adjustment	
2011*	6-2: Compare quality using same geographic unit as MedPAC-recommended MA payment areas <ul style="list-style-type: none"> • CAHPS® and HEDIS® 	6-2: Compare quality using same geographic unit as MedPAC-recommended MA payment areas <ul style="list-style-type: none"> • CAHPS®
	6-3: All MA plan types collect data and report HEDIS® measures on same basis	
2013		6-4: Implement HOS for FFS, unless the Secretary determines it cannot meaningfully differentiate between FFS and MA
	6-5: Compute limited set of outcome measures based on MA plan encounter data	6-5: Compute limited set of outcome measures based on MA encounter data and FFS claims
	6-6: Continue to compute all HEDIS® measures	6-6: Compute administrative-only HEDIS® measures that can be validly compared
	6-7: Expand scope of measure sets to fill current gaps in populations and conditions	
Concurrent with CMS implementation	6-8: Provide resources to CMS sufficient for implementing recommendations	

Note: MA (Medicare Advantage), FFS (fee-for-service), EHR (electronic health record), CAHPS® (Consumer Assessment of Healthcare Providers and Systems), HEDIS® (Healthcare Effectiveness Data and Information Set), HOS (Health Outcomes Survey).

*To the extent that a recommendation involves aggregating quality indicators based on currently collected data, those results could be reported in 2011. For recommendations that involve a change in MA plans’ data collection processes during the course of the year (e.g., requiring the collection of new data and therefore incurring new costs that had not been anticipated in MA plan bids), data collection could begin in 2011 but reporting would not be possible until 2012.

or administrative changes that the Commission finds appropriate to improve comparisons of quality and patient experience measures among MA plans and between the MA and the FFS programs. Table 6-1 provides a chronological roadmap for implementing our recommendations. Below, we describe the recommendations and explain their rationale and impact on beneficiaries and providers.

Recommendation 6-1: Ensure EHRs can be used to evaluate quality

The absence of clinically detailed quality measurement tools that are based on medical record information is a fundamental limitation on the scope—and for many providers, the validity and “actionability”—of existing quality measures. Ideally, quality measures should incorporate clinically relevant longitudinal information on patients’ visits, diagnoses, procedures, medications, and laboratory results (Hayward 2008, Shahian et al. 2007). Large-scale efforts to extract these data from paper-based

medical records on a routine basis are not practical, given their cost and time-consuming nature (Institute of Medicine 2006).

Today, EHRs hold promise to provide detailed clinical data for quality measurement and improved risk adjustment (Kmetik et al. 2007, National Quality Forum 2008). The adequacy of risk adjustment for quality measures based on administrative data remains a major concern for providers and health plans, because administrative data lack clinical detail and systematically underrepresent patient comorbidities and other factors related to baseline risk (Institute of Medicine 2006).

New Medicare incentives authorized by the American Recovery and Reinvestment Act of 2009 (ARRA) are expected to accelerate the adoption and use of EHRs by hospitals, physicians, and integrated delivery systems in the United States. Sections 4101 and 4102 of ARRA provide Medicare bonus payments to eligible professionals who are “meaningful users” of certified EHRs by calendar

years 2011–2014 and for hospitals that are meaningful users of certified EHRs by fiscal years 2011–2015. Starting in 2015, eligible professionals and hospitals that are not meaningful users of certified EHRs will receive reduced Medicare payments.⁹ The Congressional Budget Office estimates that the incentive mechanisms in ARRA will boost EHR adoption rates to about 70 percent for hospitals and about 90 percent for physicians by 2019 (Congressional Budget Office 2009).

In August 2009, a Department of Health and Human Services (HHS) federal advisory committee (the HHS HIT Policy Committee) issued nonbinding recommendations for the meaningful use qualification criteria (Health Information Technology Policy Committee 2009), and the Commission submitted a comment letter on the committee’s proposal, strongly supporting the use of HIT to improve the quality and reduce the cost of care for Medicare beneficiaries (Medicare Payment Advisory Commission 2009a). In January 2010, CMS set forth a proposed set of meaningful use criteria for the Medicare HIT subsidies in a notice of proposed rule making (Centers for Medicare & Medicaid Services 2010). The Commission intends to submit a comment letter to CMS stating its support for the proposed criteria, which largely follow the HIT Policy Committee’s recommendations and are consistent with Recommendation 6-1. The final criteria defining meaningful use for at least the first two years of the Medicare subsidy program (2011–2012) are expected to be issued by CMS by mid-2010.

RECOMMENDATION 6-1

The Secretary should define electronic health record “meaningful use” criteria such that all qualifying electronic health records can collect and report the data needed to compute a comprehensive set of process and outcome measures consistent with these recommendations [Recommendations 6-2 through 6-7]. Qualifying electronic health records should have the capacity to include and report patient demographic data, such as race, ethnicity, and language preference.

RATIONALE 6-1

The definition of EHR meaningful use—in connection with forthcoming Medicare subsidies for providers’ adoption and use of EHRs—will have a major impact on EHRs’ capabilities to collect and report data needed for quality measurement, including improved risk adjustment of outcome measures. The forthcoming meaningful use criteria should require the technical capacity to capture

and report the data elements needed to implement the Commission’s other recommendations in this chapter pertaining to improving MA plan-to-plan and MA-to-FFS quality comparisons.

EHRs should contain accessible information on relevant patient demographic data, such as race, ethnicity, and language preference. From the provider or plan perspective, for example, it is useful to know whether a person requires translation services during an encounter. Some of the demographic information may be obtained from CMS’s administrative records if the reliability of race and ethnicity data can be improved (Eicheldinger and Bonito 2008). In such cases, a person-level identifier, such as an encrypted personal identification number, would be needed to link the demographic data in Medicare administrative records to each beneficiary’s EHR. Some relevant demographic information—such as finer distinctions in race and ethnicity categories and patient language preferences—is more feasibly collected by providers during patient encounters and may also be included in EHRs.

The vision of quality measurement underlying this recommendation is that, for most quality measures, the measurement and comparisons of quality at the MA plan and FFS area level will involve the aggregation of data reported by individual providers from the EHRs they maintain for their patients. A small number of MA plans also will be considered meaningful users of HIT for the purposes of the Medicare subsidies (if they meet the criteria specified by CMS) and they also will maintain EHRs for their patients. But most beneficiaries in MA and FFS Medicare likely will continue to be served by hospitals and physicians that do not participate in that subset of highly vertically integrated MA plans. The intent of this recommendation is to ensure that the necessary quality data elements can be captured, reported, and aggregated for as many FFS and MA enrollees as possible to allow comparisons of quality between the two sectors.

IMPLICATIONS 6-1

Spending

- No additional CMS costs would be incurred beyond baseline costs to implement EHR meaningful use criteria.

Beneficiary and provider

- EHRs meeting meaningful use criteria would offer providers and beneficiaries information on the full

scope of quality measures with reporting by race or ethnicity, gender, and age group.

- There would be no provider costs beyond baseline spending to acquire and use EHR systems that meet CMS meaningful use criteria.

Recommendation 6-2: Revise the geographic unit for reporting

For both the MA-to-MA comparison and the FFS-to-MA comparison, evaluations should be made for the same geographic area at a level that is meaningful for beneficiary decision making, for CMS's evaluation of the comparative quality of each plan and each sector, and for purposes of benchmarking (evaluating current quality and change over time). Currently, quality results for MA plans generally are reported on a contract-wide basis. MA contracts often cover a wide geographic area, sometimes an entire state—as in the case of plans in California, Florida, and Texas. Those large areas may include many diverse health care markets. Reporting at a smaller geographic level would provide a better picture of relative quality among MA plans and between MA and FFS—which is important for benchmarking purposes.

In its June 2009 report, the Commission recommended the use of MA payment areas consisting of metropolitan statistical areas (as long as they did not cross state boundaries) and National Center for Health Statistics health service areas for a state's nonmetropolitan areas (Medicare Payment Advisory Commission 2009b). These alternative payment areas would replace the current county-based payment areas and more closely approximate insurance markets. Increasing the size of payment areas, decreasing the size of quality reporting (contract) areas, and making payment and reporting areas coincide would have two benefits, even though an increase in the number of reporting units for quality measures would be required. First, program management would be improved by making it possible to differentiate plans on quality and then translate those differences to increased (or decreased) payments in a pay-for-performance system. Second, beneficiaries would have better quality information on the plans they could join in their area and would have the opportunity to make more informed choices. Changes that would allow reporting at the smaller geographic level can be in place by 2011.¹⁰

Because the new reporting areas would be smaller than the current contract areas in some cases, there would be

an additional burden on plans (which finance much of the cost of the quality reporting activities). Costs are very likely to increase because survey sample sizes will have to be increased for statistically valid reporting. CMS would have the burden of computing results for each geographic area for the FFS sector. CMS would also need additional resources to boost sample sizes in its surveys of FFS beneficiaries. Having adequate survey sample sizes would also be an issue in FFS.

Smaller geographic areas may have fewer enrollees—sometimes too few to yield statistically valid results for purposes of public reporting. Similarly, there are plans with small numbers of enrollees or in which the enrollment may be large but dispersed over many health care markets (as is particularly true of PFFS plans and regional PPO plans). In certain circumstances, the Secretary would have to develop alternative ways to evaluate and report on quality within geographic areas—for example, by using three-year rolling averages or otherwise aggregating the information in a statistically valid manner that provides useful and reliable information about the performance of one plan relative to another in an area and with respect to FFS in the area. In some cases, public reporting on the performance of a given plan in a particular area may not be feasible, and the only possibility may be to report on the plan's overall performance across all its markets.

RECOMMENDATION 6-2

The Secretary should collect, calculate, and report quality measurement results in Medicare Advantage at the level of the geographic units the Commission has recommended for Medicare Advantage payments, and calculate fee-for-service quality results for purposes of comparing Medicare Advantage and fee-for-service using the same geographic units.

RATIONALE 6-2

The current collection and reporting of most quality measures in MA occur at the level of the MA contract. Some MA contracts cover very wide geographic areas. Plans in California that cover much of the state report one set of statewide HEDIS results, for example, even though parts of California have very different health care markets, with different provider and plan characteristics in each geographic area.

To inform beneficiaries about the relative quality of MA plans and MA relative to FFS, comparisons should pertain to the geographic area where beneficiaries are making

choices. Using a smaller geographic area that is more consistent with the patterns of health care delivery would also facilitate CMS's quality monitoring and evaluation role in both MA and FFS.

IMPLICATIONS 6-2

Spending

- Substantial CMS administrative resources would be required.

Beneficiary and provider

- Beneficiaries' ability to compare plans and systems would be improved, but more beneficiaries would be included in surveys.
- Many plans would face additional costs because of an increase in the number of reporting units.

Recommendation 6-3: Level the playing field among MA plan types for HEDIS reporting

This recommendation pertains to the comparison among MA plans across different plan types (HMOs versus PPOs and PFFS plans). HEDIS reporting requirements for MA plans consist of process measures and intermediate outcome measures that are based on administrative data (claims data, encounter data, laboratory results, and EHRs), supplemented in some cases by information obtained from individuals' medical records. The latter type—the so-called “hybrid” measures—can include information drawn from a sample of plan enrollees' medical records as well as administrative data.

In the past, we expressed concern about the lack of a level playing field among MA plans in HEDIS reporting—because PFFS plans were not required to participate in HEDIS reporting and because not all plans report on the same basis (Medicare Payment Advisory Commission 2008). As of 2010, all MA plan types—HMOs, PPOs, and PFFS—have HEDIS requirements, but the requirements vary by plan type. PPOs and PFFS plans are exempted from reporting measures that are based exclusively on medical record review. Only HMOs and PPOs (not PFFS plans) are permitted to include data from medical records when they report on HEDIS hybrid measures that are based on a combination of administrative data and medical record review.¹¹

Another difference among plan types in HEDIS reporting is that a statutory provision limits the reporting of PPOs to services rendered by network providers. A MIPPA

provision added a similar limitation on PFFS and medical savings account plan reporting as of 2011—such plans have to report only on care provided through contracted providers (Centers for Medicare & Medicaid Services 2009b).¹²

To have uniform, comparable reporting across MA plans, which is a prerequisite for benchmarking plan performance, reporting standards and practices need to be the same across plans. All plan types should report results for all providers, and all plans should use medical record review as appropriate to report results. These changes are feasible for data collection occurring in 2011 for reporting in 2012.

RECOMMENDATION 6-3

The Secretary should have all health plan types in Medicare Advantage report on the same basis, including reporting measures based on medical record review, and the Congress should remove the statutory exceptions for preferred provider organizations and private fee-for-service plans with respect to such reporting.

RATIONALE 6-3

Requiring all plans to report using the same methodology enables a valid plan-to-plan comparison across all HEDIS measures, including intermediate outcome measures, which involve medical record review. A plan should report on all services its enrollees receive—regardless of whether providers are under contract.

IMPLICATIONS 6-3

Spending

- CMS would incur costs in processing more data than would otherwise be reported.

Beneficiary and provider

- Beneficiaries would have better information to compare MA plans.
- Plans would incur additional costs in reporting on measures requiring medical record review. Some providers could incur additional costs in providing medical records for review.

Recommendation 6-4: Enhance the Health Outcomes Survey for MA and FFS

The HOS is a longitudinal survey of self-reported health status among MA plan enrollees over a two-year period.

There currently is no HOS in FFS Medicare. The survey's methodology could be improved to make it a better tool for comparing MA plans and for eventual use in FFS Medicare to compare outcomes between MA and FFS. The problem is that HOS produces results that often show no significant difference among most plans in enrollee outcomes. (HOS results are reported differently at the www.medicare.gov website, with more differentiation among plans, including in the CMS star rating system for plan quality.¹³ This issue is discussed in the online appendix to this chapter.)

NCQA is working with CMS to study why the current HOS methodology identifies only a few outlier plans, with a view toward recommending potential changes to the methodology and developing new methods and processes. NCQA and CMS will examine the current case mix variables, current statistical methods used in HOS, and current criteria for establishing outliers. NCQA has noted that one issue is that the need for a two-year change score, which is the basis of judging outcomes, limits the number of enrollees with reportable HOS results and “may contribute to the lack of variation and usefulness of the measure” (National Committee for Quality Assurance 2009a). Under the current methodology, if CMS were to field the equivalent of the HOS in the FFS sector, it is uncertain whether the results would show statistically valid differences between MA and FFS or across FFS.

Implementation of the HOS in FFS would be a major undertaking that would involve a lengthy planning and start-up period. For this reason, and because the HOS involves an initial survey and a follow-up survey two years later, implementation of such a survey in FFS would not produce results until well after 2011. Changes to the methodology for making comparisons among MA plans could be implemented by 2011.

RECOMMENDATION 6-4

The Secretary should collect and report the same survey-based data that are collected in Medicare Advantage through the Health Outcomes Survey for the Medicare fee-for-service population, unless the Secretary determines that such data cannot meaningfully differentiate quality among Medicare Advantage plans and between fee-for-service and Medicare Advantage.

RATIONALE 6-4

The HOS could be a valuable tool in program management, quality improvement, and beneficiary education. Work should start on a FFS-to-MA comparison,

but the Secretary should investigate whether greater distinctions can be drawn among MA plans and whether meaningful differences can be reported between MA and FFS. Currently, HOS results in MA do not show clear distinctions among plans. Extensive resources would be required to conduct the HOS across the FFS sector.

IMPLICATIONS 6-4

Spending

- Substantial CMS administrative resources would be required if the HOS is expanded to FFS beneficiaries.

Beneficiary and provider

- Beneficiaries' ability to compare plans and systems would be improved, but more beneficiaries would be included in surveys, increasing the response burden.
- There would be no implications for plans and providers.

Recommendation 6-5: Use MA plan encounter data to evaluate quality

Medicare needs encounter data from MA plans so that it can use outcome measures to assess and compare the quality of inpatient and ambulatory care in MA and FFS Medicare. Patient encounter data are collected by health plans from the health care facilities and professionals who provide services to the plan's members. Encounter data may be derived from claims submitted by providers to the plan (including “zero-pay” or “no-pay” claims, which are used not to pay a provider but only to generate an encounter record), or the necessary data elements may be extracted from patient-level EHR systems maintained by providers.

As discussed on page 316, we examined four types of outcome measures that could be used as quality indicators for MA plans and for FFS Medicare within a designated geographic area:

- hospital readmission rates for conditions in which clinical evidence suggests that appropriate discharge planning and postdischarge follow-up can prevent readmission;
- hospital admission rates for ACSCs;
- potentially preventable ED visits; and
- mortality rates during or within up to 30 days after a hospital stay for patients diagnosed with specific

conditions, such as a heart attack, heart failure, or pneumonia.

These measures could be computed for FFS today using existing claims and hospital discharge record data.

Medicare currently cannot use these measures to assess and compare quality among MA plans and between MA and FFS Medicare because the necessary encounter data for MA enrollees are not available.

RECOMMENDATION 6-5

The Secretary should expeditiously publish specifications for forthcoming Medicare Advantage plan encounter data submissions to obtain the data needed to calculate patient outcome measures.

RATIONALE 6-5

Outcome measures are important indicators of the quality of care provided to MA plan members and FFS beneficiaries in a given geographic area. Four types of outcome measures can be calculated for FFS Medicare with available claims data and could be calculated for MA plans if plans were required to submit the necessary encounter data. CMS intends to require MA plans to submit encounter data starting in 2012, which presents an opportunity to request the encounter data elements needed to compute the specified outcome measures for MA plans, enabling comparisons between MA plans and between MA and FFS Medicare by 2013.

IMPLICATIONS 6-5

Spending

- Little or no additional administrative costs would be incurred above the costs already assumed in the agency's budget for collecting encounter data from MA plans beginning in 2012.

Beneficiary and provider

- For beneficiaries, important information on patient outcomes would be available when comparing MA plans and comparing MA with FFS in their local area.
- Providers and plans could incur costs above those assumed for the planned 2011 encounter data collection and reporting.

Recommendation 6-6: Compute selected HEDIS measures for FFS Medicare

Some measures in the HEDIS MA data set could be the basis of an MA-to-FFS comparison if HEDIS measure

specifications were used to compute FFS results derived from claims data. This approach has been used by CMS on a pilot basis in its Generating Medicare Physician Quality Measurement Results project and by the Dartmouth Atlas group for the Robert Wood Johnson Foundation's Aligning Forces for Quality project (Fisher et al. 2008). However, we have a number of concerns about whether FFS and MA HEDIS measures could be truly comparable without some adjustments to the measure specifications and to the populations being compared.

The first concern is about the use of hybrid HEDIS measures, which are those that include the use of administrative data and medical record review in MA. FFS claims data alone are insufficient to compute a measure comparable to the MA result. Even if the MA results for hybrid measures were limited to an administratively determined rate (i.e., without medical record review), the administrative rate from an MA plan is based on claims data, encounter data, pharmacy information, and in some cases electronic medical records—a richer source of information than FFS claims (even if they were combined with Medicare Part D pharmacy data). In light of expected new sources of information on quality indicators to compare FFS and MA (encounter data and EHRs) that would provide an equivalent type of information, it would be unreasonable to undertake a major effort to obtain what would end up being duplicative information from FFS through medical chart review for purposes of comparing MA results on hybrid HEDIS measures.

A second concern is that, even for the HEDIS derived only from administrative data, there can be material differences, unrelated to the quality of care, between a HEDIS rate reported by an MA plan and a FFS rate computed from claims data. In addition to MA plans' richer sources of administrative data, other factors would affect an MA-to-FFS comparison—namely, differences in populations and cost-sharing requirements that can affect utilization rates. The HEDIS measure for breast cancer screening is illustrative. The share of beneficiaries under age 65 is smaller in MA than in FFS. Because mammography screening rates are lower in the under-65 population, this factor would need to be taken into account for a valid comparison. The text box on p. 324 elaborates on this difference and the influence of cost sharing on the use of mammography.¹⁴

A third confounding factor in examining quality differences between MA and FFS is the potential for a spillover effect—that is, the effect an area's MA plans

How population distribution and cost sharing can affect Healthcare Effectiveness Data and Information Set measure comparability between Medicare Advantage and fee-for-service Medicare

Breast cancer screening rates were among the fee-for-service (FFS) results that CMS reported through its Generating Medicare Physician Quality Measurement Results (GEM) project, which was a CMS initiative in 2007–2008 that computed Healthcare Effectiveness Data and Information Set (HEDIS®) measures in FFS by geographic area using claims data (Centers for Medicare & Medicaid Services 2008a).

The average Medicare Advantage (MA) plan screening rate was about 10 percentage points higher than the FFS national average rate. For FFS, the GEM project reported the total rate across the 40- to 69-year age group for 2006–2007. MA plans reported total rates for the same age group as well as separate rates for the 40- to 52-year and 53- to 69-year age groups. The screening rates for the younger age group in MA plans were much lower than for the older group. If the same relationship held in FFS (lower rates for younger than for older women), the total rate reported for FFS in the GEM data would be understated in relation to the MA rate, because MA plans enroll a much smaller proportion of Medicare beneficiaries under age 65 than are enrolled in FFS Medicare. A more comparable measure for breast cancer screening would focus on the screening rates for women only in the age 65 or older group.

The mammography measure could demonstrate “value added” by MA plans relative to FFS. MA plans have

the potential advantage of having greater systematic control over screening rates through telephone and mail reminders to beneficiaries plan wide, and plans can facilitate access to care (including, among some plans, providing transportation). In contrast, FFS Medicare tools for improving aggregate screening rates are more diffuse, relying on efforts such as public health campaigns and notifications by individual providers.

Another issue affecting data comparability involves cost-sharing differences between MA and FFS and among MA plans. Trivedi and colleagues examined cost sharing for mammograms in MA plans and found that “relatively small copayments were associated with significantly lower mammography rates among women who should undergo screening mammography according to accepted clinical guidelines” (Trivedi et al. 2008). Differences in screening rates that reflect cost-sharing differences also arise in FFS Medicare. Results in FFS can differ by geographic area when a large percentage of FFS Medicare beneficiaries have supplemental insurance—such as medigap, employer-based retiree health benefits, or Medicaid coverage—that reduces or eliminates FFS cost sharing for the services being measured. Benefit design and the richness of an individual’s Medicare benefit package in MA or as supplemented in FFS can therefore have an effect on a HEDIS measure that is intended to show a difference in the quality of care that providers and health plans render in each program. ■

may have on FFS quality. The hypothesis is that, because many of the same providers treat patients covered under MA and FFS, any MA plan-driven quality improvements translate into changes in providers’ practice patterns for patients treated in FFS as well, making it difficult to isolate the effect of quality improvements in one program or the other. The text box briefly discusses the spillover hypothesis. One benefit of CMS collecting comparable quality data on both the FFS and MA programs would be the opportunity to further test the validity of the spillover hypothesis.

Given these differential factors, some HEDIS-like measures may need adjustments to produce valid comparisons between MA and FFS.

RECOMMENDATION 6 - 6

The Secretary should calculate fee-for-service results for Healthcare Effectiveness Data and Information Set administrative-only measures for those measures the Secretary determines can provide a valid comparison of the two sectors.

Quality of care: The spillover effect

The literature on the potential for spillover between Medicare Advantage (MA) and fee-for-service (FFS) Medicare to affect quality is mixed. A number of researchers have found such an effect (as shown in multiple articles identified by Federman and Siu (2004)). Heidenreich and colleagues found that in areas with high HMO penetration (commercial and other enrollment), Medicare FFS beneficiaries were more likely to receive appropriate treatment with beta-blockers and aspirin following a heart attack—indicating a positive spillover effect (Heidenreich et al. 2002). Basu and Mobley, however, found that a county’s managed care penetration (in commercial and Medicare HMOs) did not have a significant effect

on preventable hospital admissions in any of the four states they examined (California, New York, Florida, and Pennsylvania) (Basu and Mobley 2007). Additional research is under way on the effect of MA spillover on quality (Harvard Medical School 2009).

Some activities that plans undertake (such as advising providers to contact enrollees to obtain tests and monitoring) would not have a direct spillover effect in FFS. Quality improvement activities in FFS may also “spill over” to benefit MA plans. For example, the efforts of FFS Medicare to evaluate the quality of providers (e.g., through Hospital Compare) can lead to improvements in provider quality across all sectors. ■

RATIONALE 6-6

HEDIS-like measures for FFS can be calculated in a straightforward manner with Medicare FFS claims data (including prescription drug event data from Part D) for those HEDIS measures that do not rely on medical record review and that the Secretary finds can yield valid comparisons of quality between the MA and FFS programs. CMS has computed such measures in the past and reported results at the ZIP code level. However, comparisons need to be viewed with caution because there are important differences between MA and FFS that affect the results. MA administrative data can include additional information not currently available in FFS administrative data systems. Differences between the populations and benefit design of the two programs should also be taken into account. The Secretary should ensure that the HEDIS-like measures in FFS that are compared with MA results reflect differences in quality and not other factors.

IMPLICATIONS 6-6

Spending

- CMS would incur administrative costs in computing and reporting the selected HEDIS measures for FFS Medicare.

Beneficiary and provider

- Beneficiaries’ ability to compare plans and programs would improve.

- Providers and plans, which currently submit the data that would be used for these computations, would incur no additional costs.

Recommendation 6-7: Add new quality measures

An issue of concern with the current HEDIS measures is whether they are sufficiently comprehensive for Medicare beneficiaries. Among the set of 46 HEDIS measures for Medicare, 19 are drug related, but few non-drug-related measures apply to the oldest Medicare beneficiaries. For example, of the 6 intermediate outcome measures, only 1 applies to beneficiaries between 75 and 85 years of age, and none applies to people over 85.

Quality measures for diabetes provide a case study. The 9 HEDIS diabetes measures are reported only through age 75. However, Medicare Current Beneficiary Survey data indicate that about 20 percent of community-dwelling Medicare beneficiaries age 75 to 84 have diabetes (declining to 13.5 percent in the 85+ age category) (Adler 2008)). According to one estimate, nearly half the elderly with diabetes (44 percent) are not included in HEDIS diabetes measures (McBean et al. 2003). The HEDIS measure’s cut-off at age 75 exists because beneficiaries in the older age groups require tailored, person-specific plans of care to deal with diabetes, precluding the use of uniform measures for these individuals (National Committee for

Quality Assurance 2009b). This problem exists for many conditions, and it is unclear how to overcome the problem for a population with so many comorbidities.

NCQA has been adding more measures for the very aged to the HEDIS data set. A subset of MA plans—the SNPs that serve the chronically ill, beneficiaries eligible for both Medicare and Medicaid (dual eligibles), and institutionalized beneficiaries—report an additional set of measures, which could apply to all MA plans. These measures can provide an indication of the value added that a plan can offer beyond the quality of care rendered by a plan’s individual network providers.

Compared with a comprehensive set of process measures for geriatric care like the ACOVE indicators, HEDIS has few measures of quality for conditions prevalent among the Medicare population, such as treatment for chronic pain, dementia, end-of-life care, and malnutrition. Even when HEDIS includes clinical measures, the results may be of limited usefulness. For example, CMS excludes seven measures from the star rating system of overall plan quality because the incidence of the services being measured is too low to be statistically valid. All five HEDIS Medicare mental health measures (two for follow-up after inpatient mental health care and three for antidepressant medication management) are excluded from the star system for this reason.

RECOMMENDATION 6-7

The Secretary should develop and report on additional quality measures for Medicare Advantage plan and Medicare Advantage-to-fee-for-service comparisons that address gaps in current quality measures.

RATIONALE 6-7

Expanding HEDIS’s quality measures to cover a wider range of Medicare beneficiaries and more medical conditions would make the quality reports generated from HEDIS meaningful and actionable by plans and providers to improve the quality of care for beneficiaries with the specified characteristics, such as beneficiaries over age 75 and beneficiaries with disabilities. The addition of measures that assess plan functions, such as care coordination and medication management, would provide information on the value of quality improvements that plans offer in addition to the care rendered by a plan’s network of individual providers.

IMPLICATIONS 6-7

Spending

- Additional administrative resources for CMS would be required.

Beneficiary and provider

- Beneficiaries with certain characteristics—such as older beneficiaries, those with disabilities, or those with certain chronic health conditions—would have access to quality information that is more pertinent to their health care needs.
- Providers and plans would incur cost increases for collecting and reporting data needed to compute new HEDIS measures.

Recommendation 6-8: Provide resources to CMS sufficient to implement other recommendations

The Commission is aware that implementation of the foregoing recommendations would require significant CMS administrative resources. Because of the analytic and labor-intensive nature of the tasks involved, this level of resources is needed to ensure that new quality measures developed and existing measures refined will produce accurate and reliable comparisons. Faulty comparisons would be detrimental to:

- the goals of policymakers who seek to pay MA plans and FFS providers differentially based on their relative performance on quality measures;
- plans and providers that seek to use Medicare quality reports for internal quality improvement efforts; and
- beneficiaries who need a reliable, objective source of information for comparing quality among plans and between FFS and MA.

RECOMMENDATION 6-8

The Congress should provide the Secretary with sufficient resources to implement the Commission’s recommendations in this report.

RATIONALE 6-8

The resources required to implement Recommendations 6-1 through 6-7 are likely to be substantial. It is important to beneficiaries, plans, providers, and policymakers that quality comparisons between MA and FFS Medicare and among MA plans are accurate, as the unintended

consequences of faulty quality comparisons would be detrimental to Medicare beneficiaries, plans, and providers. It is unlikely that CMS would be able to implement the recommendations in this report with the necessary level of precision without additional administrative resources. For this reason, we believe dedicated resources are necessary. The Secretary should submit a budget proposal to the Congress that estimates the funding needed to implement the recommendations in this report.

IMPLICATIONS 6-8

Spending

- Additional costs would be incurred by taxpayers, beneficiaries, plans, or some combination of the three, depending on the funding approach selected by the Congress.

Beneficiary and provider

- Beneficiaries, plans, providers, and policymakers would have an improved ability to compare the quality of care among MA plans and between MA and FFS Medicare across several dimensions (process, outcome, and patient experience measures).

Conclusion: A set of recommendations to improve quality comparisons

The Commission recognizes that quality measurement and reporting must serve the needs of four distinct audiences: Medicare policymakers, health plans, health care providers, and Medicare beneficiaries. We emphasize that the recommendations presented in this report should be considered as a cohesive and interdependent set of actions that, if implemented in their entirety, will

significantly improve policymakers' and beneficiaries' ability to compare the quality of care among MA plans and between MA and FFS Medicare. Medicare will be able to benchmark the performance of MA plans and FFS Medicare across multiple domains of quality—clinical processes, outcomes, and patient experience—to obtain a more complete picture of quality within appropriately sized geographic areas and to track changes over time. Health plans and providers will have more comprehensive and actionable information about the quality of the care they administer or deliver. More comprehensive quality measurement also should improve the public reporting of quality measures and enable beneficiaries to make more informed decisions. In future work, the Commission plans to explore in detail how Medicare beneficiaries use information about quality and other factors to make health care decisions, such as whether to enroll in an MA plan or which FFS providers to select in their community.

Our recommendations reflect the practical reality that CMS, health plans, and health care providers need as much lead time as possible to implement any changes to Medicare's current quality measurement and reporting methods. Therefore, we took the approach of adapting current measurement systems and data sources to start improving quality comparisons by 2011. By 2013, we recommend using a limited set of clinical process and outcome measures to compare MA and FFS, while working to increase the scope of quality measures available, ultimately leading to a more comprehensive, meaningful, and actionable set of measures. For the longer term, Medicare should take advantage of the coming increase in the adoption of HIT to improve the clinical relevance and robustness of the measures Medicare uses. Lastly, it is essential that CMS be provided with sufficient dedicated administrative resources to implement the package of recommendations in this report. ■

Endnotes

- 1 Benchmarking includes: evaluating performance in relation to a norm or expected level of performance and in relation to peers or similar entities, establishing an expected level of performance and tracking performance over time, determining the degree of improvement expected over time, and using data to distinguish among entities for purposes such as rewarding higher quality performance or correcting or sanctioning poorer performance. Benchmarking also includes a public reporting component in determining how to convey differences—for example, in the methodology that the National Committee for Quality Assurance uses in its national ranking of health plans or in the star ranking system that CMS uses for the Health Plan Compare website.
- 2 For example, if more enrollees need to be included in a beneficiary survey paid for by MA plans, CMS would convey information about the new or additional requirements in 2010 for implementation during the 2011 contract year, and the results would be reported in 2012.
- 3 HEDIS is a registered trademark of the National Committee for Quality Assurance. CAHPS is a registered trademark of the Agency for Healthcare Research and Quality.
- 4 SNPs are MA plans that can limit their enrollment to certain categories of beneficiaries. The three types of SNPs are those for dual eligibles (Medicare beneficiaries with Medicaid coverage), for beneficiaries residing in nursing facilities (institutional SNPs), and for beneficiaries with specific medical conditions.
- 5 SNPs also report on 12 standard HEDIS effectiveness-of-care measures if the SNP benefit package is a component of a larger MA contract. All applicable HEDIS measures are reported for all enrollees across the entire contract, but the 12 measures must be reported for each SNP benefit package within the contract. Some MA contracts consist only of SNP plans, in which case the MA plan reports all the HEDIS measures that any other plan would report.
- 6 CMS currently does not track quality measures for the following FFS provider types: ambulatory surgical center (ASC), independent rehabilitation facility, long-term care hospital, hospice, clinical laboratory, and durable medical equipment. In some of these cases (e.g., ASC and hospice), CMS is actively developing quality measures and would need to use a regulatory notice and comment process before implementing them.
- 7 CMS could calculate PQIs for MA enrollees in a very limited way today using the AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases, which identify Medicare hospital discharges as being for FFS Medicare or MA patients in 15 states. However, even for those 15 states where the HCUP databases distinguish between MA and FFS patients, the HCUP data do not identify the specific MA plans in which beneficiaries were enrolled when they were hospitalized, so plan-level measurement and comparisons with local FFS outcomes are not possible. There also appear to be other limitations in some of the HCUP databases that would prevent stratifying outcome measure results for specific groups of beneficiaries, such as by race or ethnicity.
- 8 The development work on the ED use classification algorithm was supported by the Commonwealth Fund, the Robert Wood Johnson Foundation, and the United Hospital Fund of New York (New York University Center for Health and Public Service Research 2009).
- 9 Eligible physicians who are not meaningful users of certified HIT systems by 2015 will see their Medicare payments reduced by the following amounts: 1 percent in 2015, 2 percent in 2016, and 3 percent in 2017 and each subsequent year. (The reductions are not cumulative; they are reductions of the amount the provider otherwise would have received in that year.) For 2018 and each subsequent year, if the proportion of eligible physicians who are meaningful EHR users is less than 75 percent, the payment reduction will further decrease by 1 percentage point from the applicable amount in the previous year, though the reduction cannot exceed 5 percent. The Secretary may, on a case-by-case basis, exempt eligible physicians (e.g., rural physicians who lack sufficient Internet access) from the payment reduction if it is determined that being a meaningful EHR user would result in significant hardship. Such exemptions may not be granted for more than five years (Congressional Research Service 2009).
- 10 Even if the metropolitan statistical area becomes the reporting unit for plans operating in urban areas, further refinements could be made to the reporting unit, as multiple benefit packages can be offered under one MA contract in the same metropolitan statistical area. For example, one MA organization could offer three HMO packages: one that has a very rich benefit package offered to employer group-sponsored retirees (subsidized by the former employer), a package for individuals with a high premium but minimal cost sharing, and a low-premium plan with high cost sharing. The benefit packages could also vary in the drug coverage offered, which can affect the ability of enrollees to adhere to a drug regimen—in turn affecting quality measurement results. Thus, a further refinement to quality reporting is to consider reporting at the level of the plan benefit package (as is done for SNPs for certain HEDIS measures). An analogue to such reporting in FFS would be to report results based on

different beneficiary characteristics, such as those with and without supplemental coverage through medigap, Medicaid, or employer-sponsored supplemental coverage.

- 11 As of 2010, CMS changed its past policy of not allowing PPOs to use medical record data in reporting HEDIS results (Centers for Medicare & Medicaid Services 2009a).
- 12 Some quality measures (e.g., in HEDIS) can be based on pharmacy data. For such measures, there is an unlevel playing field within MA. Most enrollees of MA plans obtain their Medicare Part D coverage through the MA plan, but PFFS plans are not required to offer drug coverage. PFFS enrollees in those circumstances can obtain Part D coverage from stand-alone prescription drug plans. To determine quality measures based on pharmacy data for such enrollees, data could be obtained from the prescription drug plans. However, not all beneficiaries in Medicare elect drug coverage, including those who have retiree drug coverage subsidized by Medicare and those who do not enroll in Part D at all. For these beneficiaries, drug-based quality measures are not available.
- 13 CMS has developed a measurement system of plan ratings in particular domains of quality, with plans awarded from one to five stars, in half-star increments, based on their performance in each domain, along with an overall rating for plan quality based on those domains. The domains include measures or

results from HEDIS, CAHPS, HOS, appeals information from the independent review entity, plan disenrollment rates, and CMS's tracking of complaints and plan compliance activity (such as corrective action plans). With regard to HEDIS, CMS has removed from the star rating system several HEDIS measures owing to small numbers and the consequent lack of reliability of the measures. These measures are management of depression medication, mental illness measures, and persistence of beta-blockers after a heart attack. The star ratings and the source of the data are posted on CMS's website for public reporting: www.medicare.gov (the Health Options Compare site).

- 14 Another administrative-only HEDIS measure that would allow for a seemingly straightforward comparison between MA and FFS is the glaucoma screening measure. For MA, the HEDIS measure is the percent of Medicare enrollees age 65 or older, without a diagnosis of glaucoma, who were screened for glaucoma over the course of the year. In FFS Medicare, glaucoma screening is a covered benefit for high-risk beneficiaries (composed of individuals with diabetes, those with a family history of glaucoma, African Americans over the age of 50, and Hispanics age 65 or older). To have a valid comparison between the two sectors, the MA results would have to be adjusted to include only the high-risk Medicare FFS categories in the denominator.

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A P P E N D I X

A

**Commissioners' voting
on recommendations**



Commissioners' voting on recommendations

In the Medicare, Medicaid and SCHIP Benefits Improvement and Protection Act of 2000, the Congress required MedPAC to call for individual Commissioner votes on each recommendation and to document the voting record in its report. The information below satisfies that mandate.

Chapter 1: Context for Medicare payment policy

No recommendations

Chapter 2: Assessing payment adequacy and updating payments in fee-for-service Medicare

Section 2A: Hospital inpatient and outpatient services

2A-1 The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2011 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.

Yes: Behrooz, Berenson, Bertko, Borman, Butler; Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

2A-2 To restore budget neutrality, the Congress should require the Secretary to fully offset increases in inpatient payments due to hospitals' documentation and coding improvements. To accomplish this goal, the Secretary must reduce payment rates in the inpatient prospective payment system by the same percentage (not to exceed 2 percentage points) each year in 2011, 2012, and 2013. The lower rates would remain in place until overpayments are fully recovered.

Yes: Behrooz, Berenson, Bertko, Borman, Butler; Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Section 2B: Physician services

The Congress should update payments for physician services in 2011 by 1.0 percent.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Not voting: Castellanos

Absent: Chernew

Section 2C: Ambulatory surgical centers

The Congress should implement a 0.6 percent increase in payment rates for ambulatory surgical center services in calendar year 2011 concurrent with requiring ambulatory surgical centers to submit cost and quality data.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Section 2D: Outpatient dialysis services

The Congress should update the composite rate by the projected rate of increase in the end-stage renal disease market basket less the adjustment for productivity growth for calendar year 2011.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Milstein, Scanlon, Stuart

Not voting: Miller

Absent: Chernew

Section 2E: Hospice

The Congress should update the payment rates for hospice for fiscal year 2011 by the projected rate of increase in the hospital market basket index less the Commission's adjustment for productivity growth.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Chapter 3: Post-acute care providers: Common themes

Section 3A: Skilled nursing facility services

The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2011.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Section 3B: Home health services

3B-1 The Congress should eliminate the market basket update for 2011 and direct the Secretary to rebase rates for home health care services to reflect the average cost of providing care.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

3B-2A The Congress should direct the Secretary to expeditiously modify the home health payment system to protect beneficiaries from stinting or lower quality of care in response to rebasing. The approaches should include risk corridors and blended payments that mix prospective payment with elements of cost-based reimbursement.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

3B-2B The Secretary should identify categories of patients who are likely to receive the greatest clinical benefit from home health care and develop outcomes measures that evaluate the quality of care for each category of patient.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

3B-3 The Congress should direct the Secretary to review home health agencies that exhibit unusual patterns of claims for payment. The Congress should provide the authority to the Secretary to implement safeguards, such as a moratorium on new providers, prior authorization, or suspension of prompt payment requirements, in areas that appear to be high risk.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Section 3C: Inpatient rehabilitation facility services

The update to the payment rates for inpatient rehabilitation facility services should be eliminated for fiscal year 2011.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Section 3D: Long-term care hospital services

The Secretary should eliminate the update to the payment rate for long-term care hospitals for rate year 2011.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Crosson, Dean, Hackbarth, Hansen, Kane, Kuhn, Miller, Milstein, Scanlon, Stuart

Absent: Chernew

Chapter 4: The Medicare Advantage program

No recommendations

Chapter 5: Status report on Part D

No recommendations

Chapter 6: Report on comparing quality among Medicare Advantage plans and between Medicare Advantage and fee-for-service Medicare

- 6-1** The Secretary should define electronic health record “meaningful use” criteria such that all qualifying electronic health records can collect and report the data needed to compute a comprehensive set of process and outcome measures consistent with these recommendations. Qualifying electronic health records should have the capacity to include and report patient demographic data such as race, ethnicity, and language preference.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

- 6-2** The Secretary should collect, calculate, and report quality measurement results in Medicare Advantage at the level of the geographic units the Commission has recommended for Medicare Advantage payments, and calculate fee-for-service quality results for purposes of comparing Medicare Advantage and fee-for-service using the same geographic units.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

- 6-3** The Secretary should have all health plan types in Medicare Advantage report on the same basis, including reporting measures based on medical record review, and the Congress should remove the statutory exceptions for preferred provider organizations and private fee-for-service plans with respect to such reporting.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

- 6-4** The Secretary should collect and report the same survey-based data that are collected in Medicare Advantage through the Health Outcomes Survey for the Medicare fee-for-service population, unless the Secretary determines that such data cannot meaningfully differentiate quality among Medicare Advantage plans and between fee-for-service and Medicare Advantage.

Yes: Behroozi, Berenson, Bertko, Borman, Butler, Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

6-5 The Secretary should expeditiously publish specifications for forthcoming Medicare Advantage plan encounter data submissions to obtain the data needed to calculate patient outcome measures.

Yes: Behroozi, Berenson, Bertko, Borman, Butler; Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

6-6 The Secretary should calculate fee-for-service results for Healthcare Effectiveness Data and Information Set administrative-only measures for those measures the Secretary determines can provide a valid comparison of the two sectors.

Yes: Behroozi, Berenson, Bertko, Borman, Butler; Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

6-7 The Secretary should develop and report on additional quality measures for Medicare Advantage plan and Medicare Advantage-to-fee-for-service comparisons that address gaps in current quality measures.

Yes: Behroozi, Berenson, Bertko, Borman, Butler; Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

6-8 The Congress should provide the Secretary with sufficient resources to implement the Commission's recommendations in this report.

Yes: Behroozi, Berenson, Bertko, Borman, Butler; Castellanos, Chernew, Crosson, Dean, Hackbarth, Hansen, Kane, Miller, Milstein, Stuart

Absent: Kuhn, Scanlon

Acronyms

Acronyms

AAA	abdominal aortic aneurysm	COPD	chronic obstructive pulmonary disease
AARP	(formerly) American Association of Retired Persons	CPI-U	consumer price index for all urban consumers
ACE	angiotensin-converting enzyme	CPT	Current Procedural Terminology
ACEI	angiotensin-converting enzyme inhibitor	CT	computed tomography
ACE-PRO	Access to Care for the Elderly Project	CXR	chest X-ray
ACH	acute care hospital	CY	calendar year
ACO	accountable care organization	DCI	documentation and coding improvements
ACOVE	Assessing Care of Vulnerable Elders	DMARD	disease-modifying antirheumatic drug
ACSC	ambulatory care sensitive condition	DRA	Deficit Reduction Act of 2005
AHRQ	Agency for Healthcare Research and Quality	DRG	diagnosis related group
AIDS	acquired immunodeficiency syndrome	DVT	deep vein thrombosis
ALOS	average length of stay	E&M	evaluation and management
AMA	American Medical Association	ED	emergency department
AMI	acute myocardial infarction	EGHP	employer group health plan
APC	ambulatory payment classification	EHR	electronic health record
ARB	angiotensin receptor blocker	EKG	electrocardiogram
ARRA	American Recovery and Reinvestment Act of 2009	EPS	earnings per share
ASC	ambulatory surgical center	ER	emergency room
AV	arteriovenous	EROM	End Results Outcome Measures
BBA	Balanced Budget Act of 1997	ESA	erythropoiesis-stimulating agent
BEA	Bureau of Economic Analysis	ESI	employer-sponsored insurance
BLS	Bureau of Labor Statistics	ESRD	end-stage renal disease
CAD	coronary artery disease	FDA	Food and Drug Administration
CAH	critical access hospital	FEHB	Federal Employees Health Benefits [Program]
CAHPS®	Consumer Assessment of Healthcare Providers and Systems	FEHC	Family Evaluation of Hospice Care
CAHPS®-FFS	Consumer Assessment of Healthcare Providers and Systems for Medicare fee-for-service	FFS	fee-for-service
CAHPS®-MA	Consumer Assessment of Healthcare Providers and Systems for Medicare Advantage	FIM™	Functional Independence Measure™
CAPD	continuous ambulatory peritoneal dialysis	FY	fiscal year
CBO	Congressional Budget Office	g/dL	grams per deciliter
CC	complication or comorbidity	GAO	Government Accountability Office
CCP	coordinated care plan	GDP	gross domestic product
CCPD	continuous cycler-assisted peritoneal dialysis	GEM	Generating Medicare Physician Quality Measurement Results [program]
CDC	Centers for Disease Control and Prevention	GI	gastrointestinal
CEA	carotid endarterectomy	GME	graduate medical education
CHF	congestive heart failure	HbA1c	hemoglobin A1c
CMS	Centers for Medicare & Medicaid Services	H-CAHPS®	Hospital Consumer Assessment of Healthcare Providers and Systems
CMS-HCC	CMS-hierarchical condition category	HCFA	Health Care Financing Administration
COP	condition of participation	HCFA-10	Health Care Financing Administration-10
		HCPCS	Healthcare Common Procedure Coding System
		HCUP	Healthcare Cost and Utilization Project
		HDHP	high-deductible health plan

HEDIS®	Healthcare Effectiveness Data and Information Set	MMSEA	Medicare, Medicaid, and SCHIP Extension Act of 2007
HF	heart failure	MPFS	Medicare physician fee schedule
HHA	home health agency	MRI	magnetic resonance imaging
HHS	Department of Health and Human Services	MSA	metropolitan statistical area
HI	Hospital Insurance (Medicare Part A)	MS-DRG	Medicare severity–diagnosis related group
HIT	health information technology	MS-LTC-DRG	Medicare severity long-term care diagnosis related group
HIV	human immunodeficiency virus	MTMP	medication therapy management program
HMO	health maintenance organization	N/A	not applicable
HOPD	hospital outpatient department	N/A	not available
HOS	Health Outcomes Survey	NAHC	National Association for Homecare and Hospice
HRSA	Health Resources and Services Administration	NAMCS	National Ambulatory Medical Care Survey
HSC	Center for Studying Health System Change	NCQA	National Committee for Quality Assurance
HUD	Department of Housing and Urban Development	NDC	national drug code
HWH	hospital within hospital	NHPCO	National Hospice and Palliative Care Organization
IME	indirect medical education	NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases
IOL	intraocular lens	NKF	National Kidney Foundation
IOM	Institute of Medicine	NORC	(formerly) National Opinion Research Center
IPPS	inpatient prospective payment system	NQF	National Quality Forum
IPS	interim payment system	NSAS	National Survey of Ambulatory Surgery
IQI	inpatient quality indicator	NTA	nontherapy ancillary
IRF	inpatient rehabilitation facility	OACT	Office of the Actuary
IRF-PAI	Inpatient Rehabilitation Facility–Patient Assessment Instrument	OASIS	Outcome and Assessment Information Set
IV	intravenous	OBQM	Outcome-Based Quality Monitoring
KFF	Kaiser Family Foundation	OECD	Organisation for Economic Co-operation and Development
LDL-C	low-density lipoprotein cholesterol	OIG	Office of Inspector General
LIS	low-income [drug] subsidy	OPPS	outpatient prospective payment system
LPN	licensed practical nurse	OR	operating room
LTCH	long-term care hospital	P4P	pay for performance
LVEF	left ventricular ejection fraction	PAC	post-acute care
MA	Medicare Advantage	PBM	pharmacy benefit manager
MACIE	Medicare Ambulatory Care Indicators for the Elderly	PDP	prescription drug plan
MA-PD	Medicare Advantage–Prescription Drug [plan]	PE	practice expense
MCC	major complication or comorbidity	PE	pulmonary embolism
MDS	Minimum Data Set	PET	positron emission tomography
MedPAC	Medicare Payment Advisory Commission	PFFS	private fee-for-service
MedPAR	Medicare Provider Analysis and Review [file]	PMPM	per member per month
MEI	Medicare Economic Index	POS	Provider of Service
MGMA	Medical Group Management Association	PPO	preferred provider organization
MIPPA	Medicare Improvements for Patients and Providers Act of 2008	PPS	prospective payment system
MMA	Medicare Prescription Drug, Improvement, and Modernization Act of 2003	PQI	prevention quality indicator

PQRI	Physician Quality Reporting Initiative	SMI	Supplementary Medical Insurance (covering Medicare Part B and Part D)
PSI	patient safety indicator	SNF	skilled nursing facility
QAPI	quality assessment and performance improvement [program]	SNP	special needs plan
RAC	recovery audit contractor	SSA	Social Security Administration
RDS	retiree drug subsidy	SSO	short-stay outlier
RHQDAPU	Reporting Hospital Quality Data for Annual Payment Update [program]	TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
RN	registered nurse	TIA	transient ischemic attack
RUG	resource utilization group	TMA	TMA, Abstinence Education, and QI Programs Extension Act of 2007
RVG	radionuclide ventriculography	TRHCA	Tax Relief and Health Care Act of 2006
RVU	relative value unit	U.K.	United Kingdom
RY	rate year	U.S.	United States
SCH	sole community hospital	USRDS	United States Renal Data System
SCHIP	State Children's Health Insurance Program	VA	Department of Veterans Affairs
SGR	sustainable growth rate		

More about MedPAC

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Oakland, CA

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Commissioners' biographies

Mitra Behrooz, J.D., is the executive director of the 1199SEIU Benefit and Pension Funds. Ms. Behrooz oversees eight major health and pension funds for health care workers. Collectively, these self-administered and self-insured health funds are among the largest in the nation. Under her leadership, the Funds have implemented a series of plan design and innovative cost containment programs, which are protecting benefits for members and retirees. Previously, Ms. Behrooz was a partner with Levy, Ratner & Behrooz, PC, representing New York City unions in collective bargaining negotiations and proceedings. While at the law firm, she also served as union counsel to Taft-Hartley benefit and pension funds. She serves on the board of the Brooklyn Health Information Exchange (BHIX). Ms. Behrooz has a law degree from New York University and an undergraduate degree in sociology from Brown University.

Robert A. Berenson, M.D., F.A.C.P., is an Institute Fellow at the Urban Institute. From 1998 to 2000 he served as Director of the Center for Health Plans and Providers in the Centers for Medicare & Medicaid Services overseeing provider payment policy and managed care contracting. Dr. Berenson was founder and medical director of the National Capital Preferred Provider Organization from 1986 to 1996. He served as an Assistant Director of the White House Domestic Policy staff in the Carter Administration. Dr. Berenson has authored many articles in nationally recognized journals and several books, and he most recently co-authored *Medicare Payment Policy and the Shaping of U.S. Health Care*. Dr. Berenson is a board-certified internist who practiced for twenty years. He received his B.A. from Brandeis University and his M.D. from the Mount Sinai School of Medicine.

John M. Bertko, F.S.A., M.A.A.A., serves as adjunct staff at RAND and as a visiting scholar at the Brookings Institution. He recently retired as the chief actuary for Humana Inc., where he managed the corporate actuarial group and coordinated the work of actuaries on Medicare Advantage, Part D, and consumer-directed health care products. Mr. Bertko has extensive experience with risk adjustment and has served in several public policy advisory roles, including design of prescription drug programs. He is also a member of the panel of health advisors of the Congressional Budget Office. He served

the American Academy of Actuaries as a board member from 1994 to 1996 and as vice president for the health practice area from 1995 to 1996. He was a member of the Actuarial Board for Counseling and Discipline from 1996 through 2002. Mr. Bertko is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. He has a B.S. in mathematics from Case Western Reserve University.

Karen R. Borman, M.D., F.A.C.S., is the General Surgery Residency Program Director and an attending physician at Abington Memorial Hospital, Abington, Pennsylvania. She is board certified in surgery and in surgical critical care. Her clinical focus is on endocrine surgery and her research focus is on surgical education. She is a member of General Surgery CPT/RUC Committee of the American College of Surgeons. She is a director and an executive committee member of the American Board of Surgery. She is the President of the Association of Program Directors in Surgery. She is a test development committee member for the National Board of Medical Examiners. She has worked with the Centers for Medicare & Medicaid Services on issues related to physician payment and service coverage. Dr. Borman was a member of the executive committee and vice-chair of the American Medical Association's Current Procedural Terminology Editorial Panel. She also served on the AMA Diagnostic and Therapeutic Technology Assessment Panel. Dr. Borman earned her medical degree from Tulane University. Her undergraduate degree in chemistry is from the Georgia Institute of Technology.

Peter W. Butler, M.H.S.A., is a nationally recognized health care executive with more than 25 years of experience in teaching hospitals and health care systems. In addition to being executive vice president and chief operating officer of Rush University Medical Center in Chicago, Illinois, Mr. Butler is an associate professor and chairman of the Department of Health Systems Management at Rush University. Before joining Rush in 2002, he served in senior positions at The Methodist Hospital System in Houston and the Henry Ford Health System in Detroit. Mr. Butler holds an undergraduate degree in psychology from Amherst College and a master's degree in health services administration from the University of Michigan.

Ronald D. Castellanos, M.D., has practiced urology for more than 30 years. For the past four years Dr. Castellanos has been a member, and for the last year the chair, of the Practicing Physicians Advisory Council on issues related to physician payment. Dr. Castellanos was president of the Florida Urologic Society and has worked with several other organizations on health policy, including the American Urologic Association and the American Lithotripsy Society. Dr. Castellanos earned his medical degree from Hahnemann Medical College. His undergraduate degree is from Pennsylvania State University.

Michael Chernew, Ph.D., is a professor in the Department of Health Care Policy at Harvard Medical School. Dr. Chernew's research activities focus on several areas, most notably the causes and consequences of growth in health care expenditures and Value Based Insurance Design (VBID). Professor Chernew is a member of the Congressional Budget Office's Panel of Health Advisors and Commonwealth Foundation's Commission on a High Performance Health System. In 2000 and 2004, he served on technical advisory panels for the Centers for Medicare & Medicaid Services (CMS) that reviewed the assumptions used by the Medicare actuaries to assess the financial status of the Medicare trust funds. Dr. Chernew is a Faculty Research Fellow of the National Bureau of Economic Research. He co-edits the *American Journal of Managed Care* and is a Senior Associate Editor of *Health Services Research*. Dr. Chernew earned his undergraduate degree from the University of Pennsylvania and a doctorate in economics from Stanford University.

Francis J. Crosson, M.D., is the associate executive director of the Permanente Medical Group. He was previously senior medical director of the Permanente Federation of medical groups that make up the physician component of Kaiser Permanente. He joined Kaiser Permanente in 1977. He was the founder and executive director of the Federation from 1997 to 2007. He also has experience with prescription drug arrangements and has led efforts on comprehensive public report cards on clinical quality, management of a drug formulary, and adoption of a state-of-the-art electronic medical record. He serves on the boards of the California Medical Association Foundation, the American Medical Group Foundation, and the Advisory Board of the Mayo Health Policy Institute. Dr. Crosson received his undergraduate degree in political science from Georgetown University and his M.D. degree from Georgetown's School of Medicine.

Thomas M. Dean, M.D., is a board-certified family physician who has practiced in Wessington Springs, South Dakota, since 1978. He is chief of staff at Avera Wessington Memorial Medical Center. Dr. Dean is on the board of directors of Avera Health Plan, the Bush Foundation Medical Fellowship, and the South Dakota Academy of Family Physicians. He was president of the National Rural Health Association, and he published articles and presented on health care in rural areas. Dr. Dean received the Dr. Robert Hayes Memorial Award for outstanding rural health provider, received the Pioneer Award from the South Dakota Perinatal Association, and was awarded a Bush Foundation Medical Fellowship. Dr. Dean earned his medical degree from the University of Rochester School of Medicine and Dentistry. His undergraduate degree is from Carleton College.

Glenn M. Hackbarth, J.D., M.A., chairman of the Commission, lives in Bend, OR. He has experience as a health care executive, government official, and policy analyst. He was chief executive officer and one of the founders of Harvard Vanguard Medical Associates, a multispecialty group practice in Boston that serves as a major teaching affiliate of Harvard Medical School. Mr. Hackbarth previously served as senior vice president of Harvard Community Health Plan and president of its Health Centers Division, as well as Washington counsel of Intermountain Health Care. He has held various positions at the U.S. Department of Health and Human Services, including deputy administrator of the Health Care Financing Administration (now known as CMS). He currently serves as the vice chairman of the board of the Foundation of the American Board of Internal Medicine. He is also a board member at the National Committee for Quality Assurance (NCQA) and at the Commonwealth Fund. He is also a member of the Commonwealth Fund's Commission on a High Performance Health System. Mr. Hackbarth received his B.A. from Pennsylvania State University and his J.D. and M.A. from Duke University.

Jennie Chin Hansen, R.N., M.S.N., F.A.A.N., of San Francisco, is president of AARP and a senior fellow at University of California's Center for the Health Professions. Ms. Hansen was executive director of On Lok Senior Health Services, the prototype for the Program of All Inclusive Care for the Elderly (PACE) a capitated program for frail elders that integrates Medicare and Medicaid finances and care delivery and was signed into federal legislation as a provider type in the BBA of 1997. PACE now operates in over 30 states. She has practiced and taught nursing in both urban and rural settings.

She currently serves in leadership roles on the National Academy of Social Insurance, the SCAN Foundation, the Institute of Medicine Initiative on the Future of Nursing and the Executive Nurse Fellows Program, the latter two funded by the Robert Wood Johnson Foundation. Ms. Hansen consults with other foundations on leadership development and independent reviews. She is a Fellow in the American Academy of Nursing. Ms. Hansen received her B.S. from Boston College and her M.S.N. from the University of California, San Francisco.

Nancy M. Kane, D.B.A., is professor of management in the Department of Health Policy and Management and associate dean of education at the Harvard School of Public Health. Dr. Kane directs the Masters in Healthcare Management Program, an executive leadership program for mid-career physicians leading healthcare organizations. She has taught health care accounting, payment systems, financial analysis, and competitive strategy. Her research interests include measuring hospital financial performance, quantifying community benefits and the value of tax exemption, the competitive structure and performance of hospital and insurance industries, and nonprofit hospital governance. Professor Kane consults with federal and state agencies involved in health system design, oversight, and payment. She is an outside director of Press Ganey, which provides patient satisfaction surveys and comparative performance reports to health care providers. Prior to obtaining her business training, she practiced as a hospital-based physical therapist. Dr. Kane earned her master's and doctoral degrees in business administration from Harvard Business School.

Herb B. Kuhn is the current president and CEO of the Missouri Hospital Association (MHA), the trade association serving the state's 176 hospitals and health systems. Prior to joining MHA, Mr. Kuhn served in multiple roles at the Centers for Medicare & Medicaid Services, including as Deputy Administrator from 2006 to 2009 and as Director of the Center for Medicare Management from 2004 to 2006. From 2000 to 2004, Mr. Kuhn served as corporate vice president for the Premier Hospital Alliance, serving 1,600 institutional members. From 1987 through 2000, Mr. Kuhn worked in federal relations with the American Hospital Association. In 2008 Mr. Kuhn was named by *Modern Healthcare* magazine as one of the 100 Most Powerful People in Healthcare in the United States. Mr. Kuhn received his Bachelor of Science in Business from Emporia State University.

George N. Miller, Jr., M.H.S.A., has, over the last two decades, managed a series of hospitals, leading financial turnarounds at four of them. Since 2008, Mr. Miller has been the Managing Partner and COO of First Diversity Healthcare Group (FDHG). FDHG is a national healthcare consulting firm helping healthcare organizations improve their operations. He was the president and CEO of Community Mercy Health Partners and senior vice president of Catholic Health Partners, a hospital chain in the Springfield, Ohio, area. Previously, he ran hospitals in Illinois, Texas, and Virginia and is the immediate past president of the National Rural Health Association. Mr. Miller has been an adjunct professor in health services administration at Central Michigan University since 1998. He has an undergraduate degree in business administration from Bowling Green State University and a master of science in health services administration from Central Michigan University.

Arnold Milstein, M.D., M.P.H., is the medical director of the Pacific Business Group on Health (PBGH) and the chief physician at Mercer Health & Benefits. PBGH is the largest employer health care purchasing coalition in the U.S. His work and publications focus on health care purchasing strategy, the psychology of clinical performance improvement, and clinical innovations that reduce total health care spending and improve quality. He co-founded both the Leapfrog Group and the Consumer-Purchaser Disclosure Project. He heads performance measurement activities for both initiatives. The *New England Journal of Medicine*'s series on employer sponsored health insurance described him as a "pioneer" in efforts to advance quality of care. Citing his nationally distinguished innovation in health care cost reduction and quality gains, he was selected for the highest individual award of the National Business Group on Health (NBGH), and of the American College of Medical Quality. He was elected to the Institute of Medicine of the National Academy of Sciences and is a faculty member at the University of California at San Francisco's Institute for Health Policy Studies. Dr. Milstein has a B.A. in economics from Harvard, an M.D. degree from Tufts University, and an M.P.H. in health services evaluation and planning from the University of California at Berkeley.

William J. Scanlon, Ph.D., is a consultant to the National Health Policy Forum. Dr. Scanlon is a member of the National Committee on Vital and Health Statistics. Before his current positions, Dr. Scanlon was the managing director of health care issues at the U.S. General

Accounting Office. Previously, he was co-director of the Center for Health Policy Studies and an associate professor in the Department of Family Medicine at Georgetown University and was a principal research associate in health policy at the Urban Institute. Dr. Scanlon has a Ph.D. in Economics from the University of Wisconsin-Madison.

Bruce Stuart, Ph.D., is a professor and executive director of the Peter Lamy Center on Drug Therapy and Aging at the University of Maryland in Baltimore. An experienced research investigator, Mr. Stuart has directed grants and contracts with various federal agencies, private foundations, state governments, and corporations. Mr.

Stuart joined the faculty of the University of Maryland's School of Pharmacy in 1997 as the Parke-Davis endowed chair in geriatric pharmacy. Previously, he taught health economics, finance, and research methods at the University of Massachusetts and the Pennsylvania State University. Earlier, Mr. Stuart was director of the health research division in the Michigan Medicaid program. Mr. Stuart was designated a Maryland eminent scholar for his work in geriatric drug use. His current research focuses on the policy implications of the Medicare prescription drug benefit. Mr. Stuart received his economics training at Whitman College and Washington State University.

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